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PUBLIC WORKS DEPARTMENT, PUNJAB.

IRRIGATION BRANCH.

ADMINISTRATION REPORT

FOR

1915-1916.

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ADMINISTRATION REPORT FOR THE YEAR 1915-16.

Part I

TABLE OF CONTENTS.

Statements.

	PAGE
Statement showing area irrigated by Punjab Canals—Major and Minor Works—with diagram	ii
Statement showing area irrigated by Punjab Canals—Major Works—with diagram...	iii
Statement showing area irrigated by Punjab Canals—Minor Works—with diagram	iv
Statement showing financial results of Punjab Canals—Major Works	v
<i>Resolution by His Honour the Lieutenant-Governor of the Punjab and its Dependencies</i>	1-7

Chief Engineer's Report.

General	1-5
Western Jumna Canal	6-10
Sirhind Canal	10-14
Upper Bari Doab Canal	15-17
Lower Bari Doab Canal	17-19
Upper Chenab Canal	19-21
Lower Chenab Canal	21-23
Upper Jhelum Canal	24-25
Lower Jhelum Canal,	25-28
Upper Sutlej Division, Inundation Canals ...	28-29
Sidhnai Canals (including the Koranga, Fazilshah and Abdul Hakim Subsidiary Canals) ...	29-30
Indus Inundation Canals ...	30-32
Shahpur (Imperial) Inundation Canals - ...	33-34
Ghaggar Canals	34-37
Lower Sutlej Inundation Canals (including) Hajiwah Canal	37-39
Chenab Inundation Canals ...	39-40
Muzaffargarh Canals ...	40-42
Shahpur (Provincial) Inundation Canals ...	42-44
Ravi Inundation Canals...	44

Diagrams.

Diagrams showing Financial and Working Records, 1915-16, Western Jumna Canal	Between pages 6-7 of the Report
Diagrams showing Financial and Working Records, 1915-16, Sirhind Canal... , ,	12-13 ,
Diagrams showing Financial and Working Records, 1915-16, Upper Bari Doab Canal... , ,	16-17 ,
Diagrams showing Financial and Working Records, 1915-16, Lower Chenab Canal	22-23 ,
Diagrams showing Financial and Working Records, 1915-16, Lower Jhelum Canal	26-27 ,

PUNJAB CANALS.

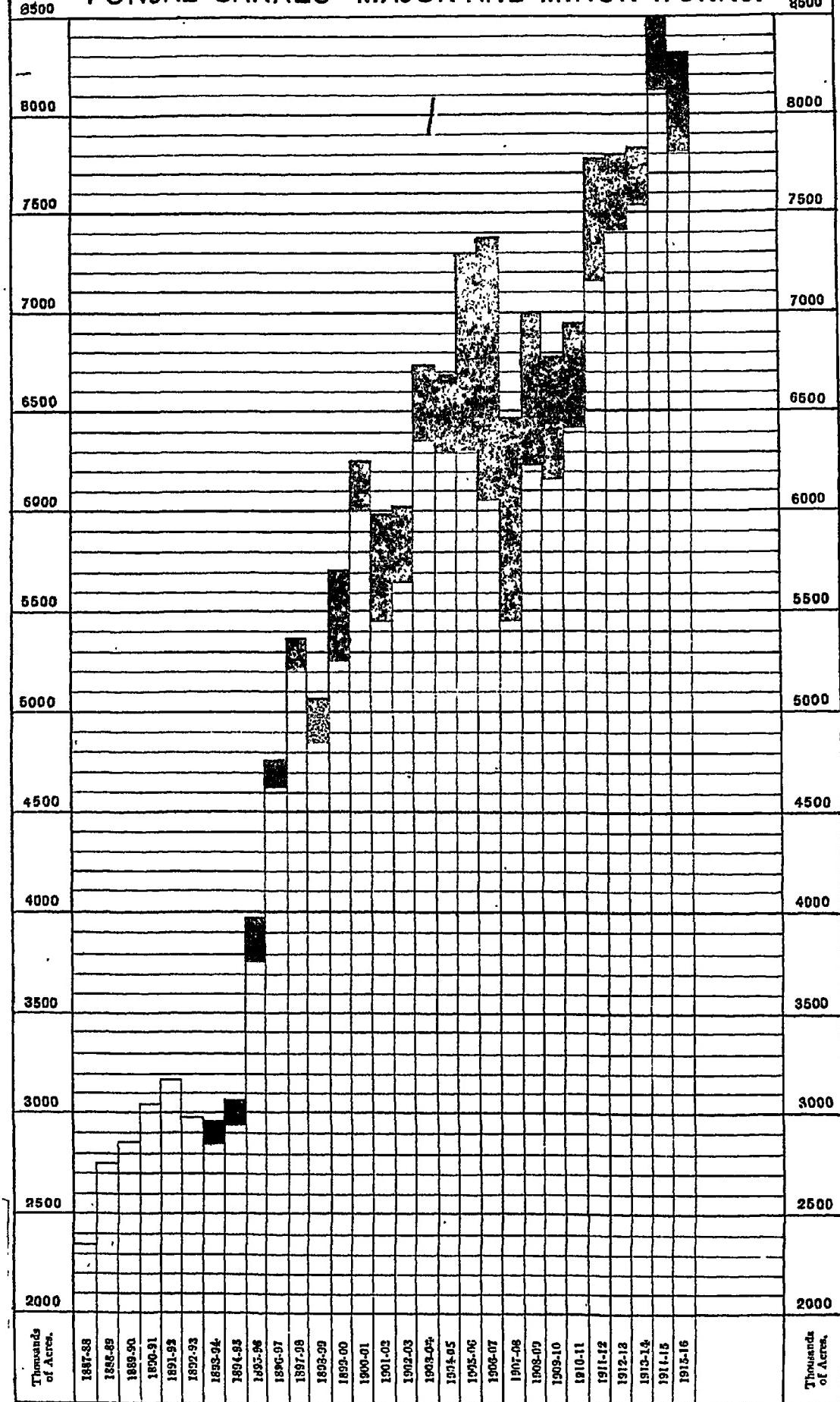
YEAR.	AREA IRRIGATED, IN ACRES.		
	Punjab Canals, Major Works.	Punjab Canals, Minor Works.	Total.
1867-1888	1,422,775	918,828
1888-1889	1,749,957	997,428
1889-1890	1,868,456	994,710
1890-1891	2,083,500	982,956
1891-1892	2,144,392	1,049,151
1892-1893	1,817,582	1,078,709
1893-1894	1,003,654	958,664
1894-1895	1,955,838	1,063,296
1895-1896	2,853,383	939,200
1896-1897	3,610,303	900,110
1897-1898	4,059,280	1,158,360
1898-1899	3,972,501	984,264
1899-1900	4,381,972	859,522
1900-1901	4,612,852	1,357,609
1901-1902	4,491,838	981,521
1902-1903	4,864,274	815,690
1903-1904	5,610,787	779,547
1904-1905	5,680,122	617,252
1905-1906	6,163,369	751,067
1906-1907	5,902,995	803,817
1907-1908	6,515,386	521,658
1908-1909	6,385,050	868,096
1909-1910	6,117,004	909,607
1910-1911	6,970,757	956,285
1911-1912	7,469,615	862,217
1912-1913	7,461,251	968,180
1913-1914	7,351,721	971,749
1914-1915	7,883,628	1,078,413
1915-1916	7,982,532	902,879
			8,884,511

From 1894-1895 to 1905-1906 the total areas shown are *net*, thereafter the areas are *gross*.

The areas include the Swat River Canal up to 1900-1901; after which date the canal was transferred to the North-West Frontier Province.

**DIAGRAM
SHOWING TOTAL AREA IRRIGATED
BY**

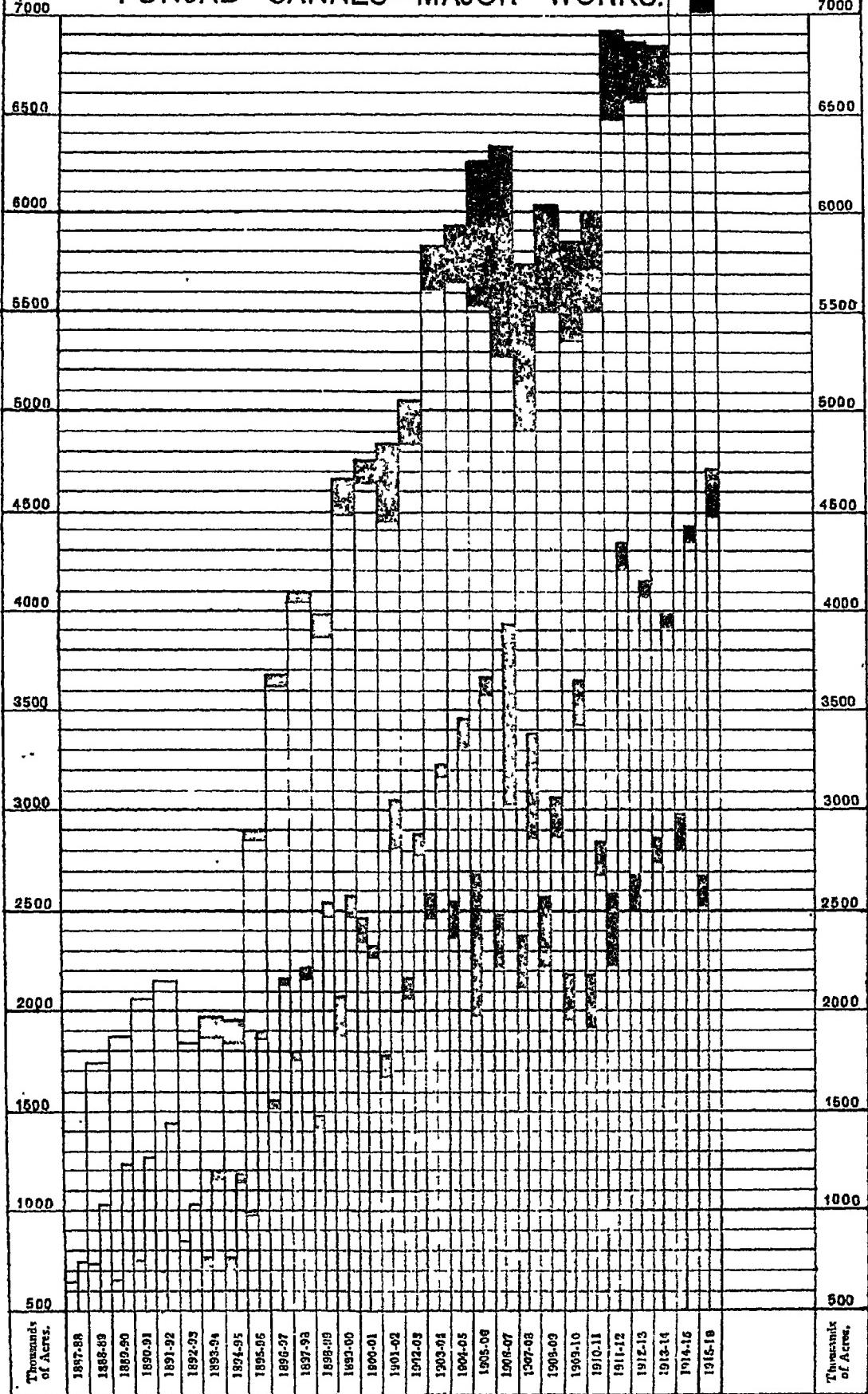
PUNJAB CANALS—MAJOR AND MINOR WORKS.



The black portions represent area remitted; the drain, net areas, from the year 1893-94.

DIAGRAM
SHOWING TOTAL AREA IRRIGATED
BY
PUNJAB CANALS—MAJOR WORKS.

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7402524



REFERENCES.

The areas irrigated annually are shown by the black line columns, the first sub-division of each annual column being the "Khari" area, coloured red, and the second the "Rabi" area, coloured blue.
The black portions represent area remitted; the drab, net areas, from the year 1893-94.

PUNJAB CANALS, MAJOR WORKS.

YEAR.	AREA IRRIGATED, IN ACRES.			REMARKS.
	Kharif.	Rabi.	Total.	
1887-1888	615,846	776,929	1,422,775	Lower Chenab Canal opened.
1888-1889	715,632	1,034,325	1,749,957	
1889-1890	661,677	1,201,779	1,863,456	
1890-1891	757,535	1,275,965	2,033,500	
1891-1892	697,454	1,446,938	2,144,392	Sirsa Branch of Western Jumna Canal opened.
1892-1893	323,235	1,024,647	1,847,882	Decrease due entirely to the favourable winter rains of 1892-93 which greatly contracted the irrigated rabi area.
1893-1894	711,001	1,192,653	1,903,654	Decrease as compared with 1891-92, due to general rainfall in rabi 1893-94, and would have been greater but for new irrigation on Chenab Canal.
1894-1895	703,930	1,151,928	1,855,858	Decrease due to very favourable rainfall during rabi, particularly in Sirhind and Western Jumna Canal tracts.
1895-1896	185,827	1,866,556	2,852,383	Increase chiefly due to partial failure of rains of 1895 and subsequent drought.
1896-1897	1,534,961	2,114,394	3,649,303	Increase due to drought.
1897-1898	1,777,565	2,275,724	4,053,289	Increase due to favourable year for irrigation and extensions.
1898-1899	1,413,822	2,458,679	3,872,501	Decrease in kharif due to favourable state of rivers and scanty rainfall.
1899-1900	1,888,308	2,496,574	4,384,972	
1900-1901	2,351,174	2,268,678	4,612,852	
1901-1902	1,686,043	2,805,795	4,491,838	Lower Jhelum Canal opened.
1902-1903	2,071,363	2,792,911	4,864,274	The Upper Sutlej Inundation Canals were transferred from head "Minor Works" to "Major Works" from 1st April 1902.
1903-1904	2,150,739	3,160,048	5,610,787	The Indus Inundation Canals were transferred from head "Minor Works" to "Major Works" from 1st April 1903.
1904-1905	2,391,786	3,307,346	5,689,132	
1905-1906	2,294,460	3,88,911	6,163,371	Decrease in kharif due to cotton failure.
1906-1907	2,435,219	3,467,776	5,902,995	
1907-1908	2,226,291	3,280,095	5,515,386	Decrease due to abnormally low supplies in the rivers.
1908-1909	2,695,518	3,680,532	6,385,050	
1909-1910	2,265,870	3,831,134	6,117,004	
1910-1911	2,254,333	4,016,424	6,270,757	
1911-1912	2,755,321	4,714,321	7,469,615	
1912-1913	2,929,309	4,531,912	7,461,251	Upper Chenab Canal opened.
1913-1914	3,069,950	4,281,771	7,351,721	Lower Bari Doab Canal opened.
1914-1915	3,184,751	4,698,877	7,883,628	
1915-1916	2,836,578	5,095,954	7,932,532	Upper Jhelum Canal opened. Decrease in kharif due to drought and abnormally low supplies in the rivers.

The areas include the Swat River Canal up to 1900-1901, after which date the canal was transferred to the North-West Frontier Province.

From 1894-95 to 1905-1906 the total areas shown are net; thereafter the areas are gross.

PUNJAB CANALS MINOR WORKS.

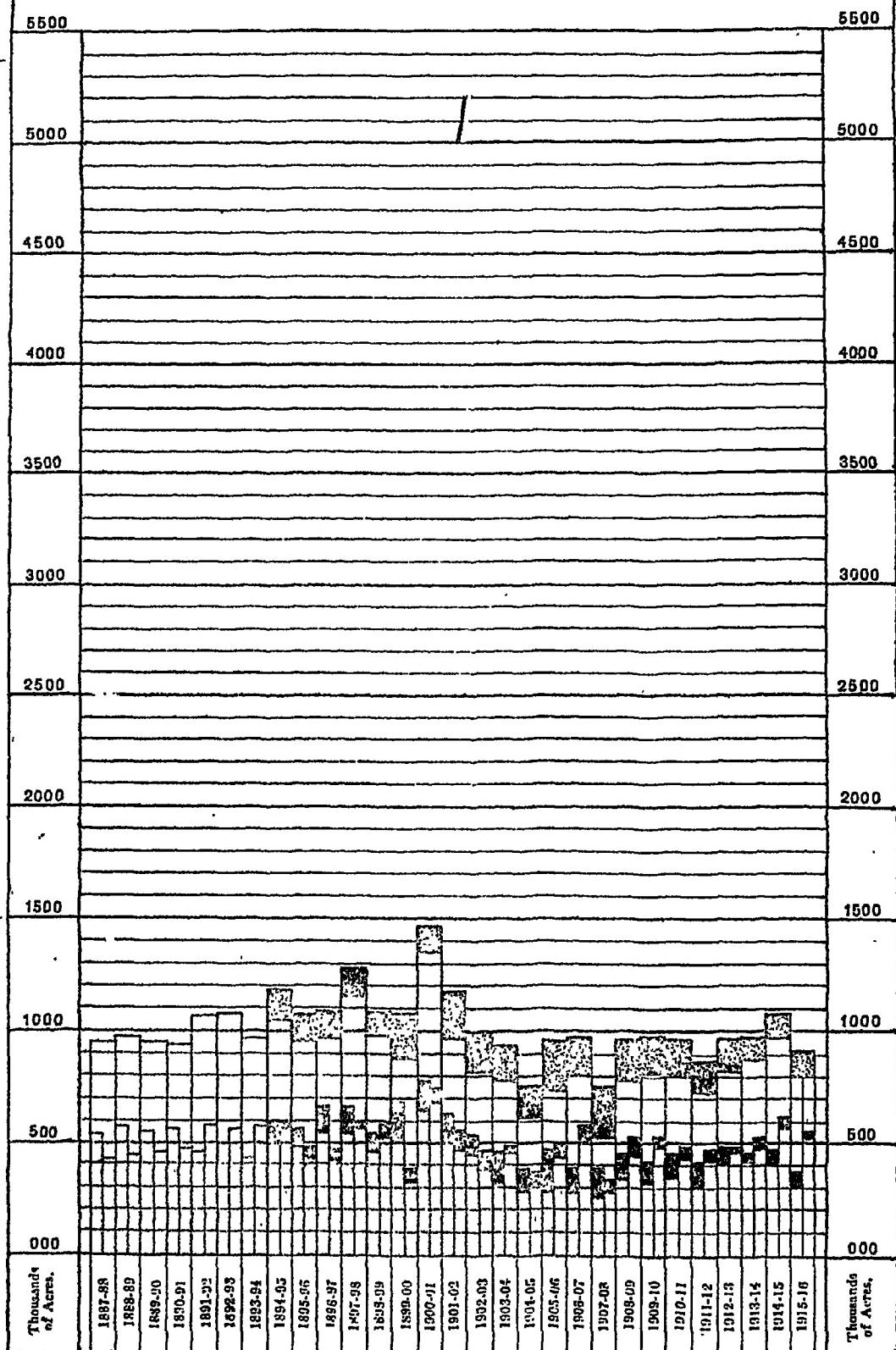
YEAR.	AREA IRRIGATED, IN ACRES.			REMARKS.
	Kharif.	Rabi.	Total.	
1887-1888	505,093	418,233	918,323	
1888-1889	571,558	425,870	997,428	
1889-1890	542,112	452,598	994,710	
1890-1891	520,408	462,548	982,956	
1891-1892	452,490	596,664	1,049,154	
1892-1893	491,151	588,558	1,079,709	Rivers rose late, but subsequent supplies were good, and rainfall was favourable, the result being the largest area on record up to date.
1893-1894	409,917	548,747	958,664	Decrease due to the destruction of kharif crops by high floods and to less favourable working of the canals.
1894-1895	500,218	563,018	1,063,296	
1895-1896	477,957	461,213	939,200	
1896-1897	533,745	426,365	960,110	
1897-1898	565,582	592,778	1,158,360	
1898-1899	453,402	530,863	984,264	
1899-1900	520,893	338,629	859,522	
1900-1901	669,563	688,136	1,357,699	
1901-1902	508,416	573,105	981,521	
1902-1903	421,819	390,871	815,690	Decrease due chiefly to the transfer of the Upper Sutlej Inundation Canals from head "Minor Works" to "Major Works" from 1st April 1902.
1903-1904	316,418	463,129	779,547	Decrease due chiefly to the transfer of the Indus Inundation Canals from head "Minor Works" to "Major Works" from 1st April 1903.
1904-1905	296,686	320,616	617,232	
1905-1906	298,279	452,788	751,067	
1906-1907	295,898	507,419	803,317	
1907-1908	258,074	260,494	524,558	
1908-1909	412,088	526,008	968,096	
1909-1910	426,020	513,587	969,607	
1910-1911	459,270	497,015	956,285	
1911-1912	402,641	459,606	862,247	
1912-1913	467,957	500,173	968,130	
1913-1914	464,872	506,871	971,743	
1914-1915	466,107	613,306	1,079,413	
1915-1916	362,607	539,672	902,279	Decrease due to drought and abnormally low supplies in the rivers.

The above includes the areas irrigated by the Shahpur Provincial Canals from 1890-1891 inclusively.

The above includes the areas irrigated on Ghaggar Canals, British and Bikaner State.

From the year 1894-1895 to 1905-1906 the areas shown are net; thereafter the areas are gross.

**DIAGRAM
SHOWING TOTAL AREA IRRIGATED
BY
PUNJAB CANALS—MINOR WORKS.**



REFERENCES.

The first sub-division of each annual column denotes the "Kharif" area, coloured red, and the second the "Rabi" area, coloured blue.

The black portions represent area admitted to the drains, net areas, from the year 1894-95.

PUNJAB CANALS, MAJOR WORKS.

YEAR.	Capital outlay, Direct and Indirect, to end of year.	Interest charges to end of year.	Net revenue to end of year.	Accumu- lated profits to end of year (column 4 minus column 3).	FOR THE YEAR.			
					Gross revenue.	Working expenses.	Net revenue.	Percentage on capital.
1	2	3	4	5	6	7	8	9
1887-1888	... 5,70,25,823	3,18,46,764	5,09,85,681	1,90,85,867	40,05,923	17,01,248	23,04,675	8·99
1888-1889	... 5,89,48,409	3,40,74,658	5,39,27,698	1,02,53,180	48,04,094	19,72,987	23,32,007	4·06
1889-1890	... 6,00,98,478	3,63,40,803	5,61,80,820	1,05,80,612	49,00,797	21,14,115	23,52,682	4·74
1890-1891	... 6,24,71,861	3,86,98,707	5,99,37,074	2,11,43,307	58,80,410	21,78,686	38,58,753	5·85
1891-1892	... 6,70,01,024	4,11,74,623	6,86,20,120	2,24,61,633	60,40,000	22,51,998	37,89,052	5·65
1892-1893	... 6,97,92,821	4,37,99,007	6,70,53,641	2,42,84,047	68,69,148	24,51,631	43,57,518	6·24
1893-1894	... 7,81,89,876	4,65,48,772	7,08,89,491	4,43,40,710	63,50,907	24,45,060	29,05,847	3·95
1894-1895	... 7,64,95,573	4,91,29,482	7,42,04,493	2,47,75,001	69,66,551	26,50,549	43,15,002	4·08
1895-1896	... 8,03,57,037	5,24,41,605	7,87,76,591	2,63,35,026	70,08,254	28,40,474	42,57,780	5·81
1896-1897	... 8,41,00,285	5,50,01,316	8,06,84,033	3,10,82,817	1,03,44,448	30,87,005	78,57,448	9·31
1897-1898	... 8,70,19,863	5,88,02,169	8,56,26,221	3,67,34,063	1,21,88,419	31,86,227	90,02,192	10·85
1898-1899	... 8,92,10,631	6,22,82,641	10,44,91,614	4,22,09,173	1,23,07,093	35,61,505	88,55,583	9·98
1899-1900	... 9,60,47,216	6,57,49,487	11,87,77,761	4,80,28,174	1,34,14,661	41,28,714	92,85,944	10·21
1900-1901	... 9,20,75,977	6,92,70,850	12,40,93,236	5,46,21,587	1,46,16,136	43,01,651	1,03,14,486	11·20
1901-1902*	... 8,04,41,635	6,99,80,552	13,16,08,016	6,15,78,364	1,46,86,198	43,26,910	1,03,08,279	11·53
1902-1903	... 10,34,01,098	7,63,36,649	14,46,20,777	8,01,59,028	1,60,14,591	48,22,073	1,17,91,021	11·80
1903-1904	... 10,69,07,917	8,03,36,374	15,82,78,899	7,70,42,626	1,85,73,691	57,18,671	1,28,55,020	12·02
1904-1905	... 10,87,68,816	8,41,58,907	17,16,51,245	8,71,91,838	1,96,10,593	62,38,247	1,83,72,346	12·28
1905-1906	... 11,01,61,719	8,66,8d,692	18,37,47,798	9,61,11,106	1,83,36,568	65,90,266	1,17,46,802	10·68
1906-1907	... 11,11,10,650	9,23,01,017	19,79,51,611	10,56,47,784	2,31,75,797	69,78,007	1,51,97,700	13·68
1907-1908	... 11,33,83,171	9,69,81,870	21,10,52,103	11,50,70,238	2,02,78,089	71,78,407	1,81,00,293	11·64
1908-1909	... 11,22,02,325	9,96,67,325	22,48,80,401	12,52,23,076	2,11,00,012	72,71,714	1,88,28,298	12·28
1909-1910	... 11,33,18,773	10,33,19,741	23,02,61,134	13,60,41,803	2,23,99,976	70,19,245	1,44,80,783	12·78
1910-1911	... 11,48,31,721	10,70,38,098	25,49,75,785	14,79,47,002	2,34,10,493	78,02,291	1,56,14,051	13·68
1911-1912	... 11,62,22,514	11,08,11,169	27,37,20,708	16,29,18,600	2,71,10,641	88,58,458	1,87,53,063	16·18
1912-1913	... 14,62,09,701	11,86,74,857	29,78,41,100	17,01,06,812	3,27,93,880	86,81,029	2,41,11,401	16·48
1913-1914	... 16,77,87,010	13,58,50,785	32,37,69,070	18,84,18,835	3,47,39,517	88,11,016	2,59,28,501	16·45
1914-1915	... 17,17,13,710	18,11,06,094	34,90,07,066	21,79,01,582	3,45,62,445	93,24,449	2,52,87,996	14·70
1915-1916	... 21,89,51,484	14,40,01,281	37,20,65,054	22,86,04,078	3,45,89,801	1,09,81,616	2,36,69,288	10·90

*Excludes the figures relating to the Sutlej River Canal, which now belongs to the North-West Frontier Province. The figures up to 1900-1901 include the figures of that canal.

The gross revenue in column 6 is that actually collected during the year and differs from the revenue as assessed on the area irrigated in the year.

GOVERNMENT OF THE PUNJAB
PUBLIC WORKS DEPARTMENT.

Irrigation Branch.

No. 1218 R. I.

The 22nd November 1916.

Resolution by His Honour the Lieutenant-Governor of the Punjab and its Dependencies.

READ—

Administration Report by the Chief Engineer, Irrigation Works, Punjab, of the Canals in the Punjab for the year 1915-16.

Capital Outlay.

THE capital outlay (direct and indirect) on Productive or Major Irrigation Works, in operation at the end of the year 1915-16, was Rs. 23,24,13,967, including Rs. 1,54,62,483 contributed by Native States.

2. The Imperial expenditure incurred during the year was Rs. 48,20,389. Of this Rs. 41,18,752 were expended on the Triple Canal Project, viz., Rs. 12,44,031 on the Upper Chenab Canal, Rs. 9,30,981 on the Lower Bari Canal and Rs. 19,43,740 on the Upper Jhelum Canal. On the other open canals the expenditure was comparatively small, except on the Upper Bari Doab and the Indus Inundation Canals. On the former 3½ lakhs were spent chiefly on the Hydro-electric Installation at Amritsar, remodelling the head-works at Madhopur and lining the Main Branch Lower with cement plaster. The large expenditure on the Indus Inundation Canals was incurred almost wholly on the scheme for giving a perennial supply of water for irrigation to the new Dera Ghazi Khan Municipality and the lowering of the bed of the head reach of the Manka Canal.

An expenditure of Rs. 97,000 was incurred on the Lower Chenab Canal mainly in connection with the measures for the prevention of water-logging.

3. On Minor Canals for which capital accounts are kept, viz., the Shahpur and the Ghaggar Canals, the capital outlay during the year, was only nominal. The expenditure up to date on these canals amounts to Rs. 8,77,485, which includes Rs. 2,85,442 contributed by the Bikaner State towards the cost of the Ghaggar Canals.

Nature of Seasons.

4. The climatic conditions for the kharif crop were unsatisfactory. Rain in February and March 1915 helped the early kharif sowings, but thereafter the crop received little or no assistance from rain. The monsoon was a marked failure. Temperatures were abnormally high throughout the season. The dry weather caused a scarcity of fodder in the early kharif, particularly in the districts of Rohtak and Hissar and in Jind and Patiala States. The scanty monsoon kept river supplies low and the inundation canals drew less water than usual. The demand for canal water during the kharif season, was very keen, but on the perennial canals it was, on the whole, satisfactorily met as the river supplies, though lower than usual, were under complete control, and were judiciously distributed.

The kharif conditions were repeated in the rabi, early sowings were helped by moderate rainfall in September and October. The winter rains failed almost completely. Owing to this and the light snowfall in the hills, the river supplies were much lower than usual and the canal supply reached a minimum on all the rivers in the Province, the deficiency being most marked on the Western Jumna. At the same time the demand for water by the cultivators was intense, and all the energy, skill and patience of the officers of the

Department were required to adjust an abnormally short supply to an exceptionally large demand. The Lieutenant-Governor has much pleasure in recording that the results were successful beyond all anticipation, for, though the number of waterings had to be considerably reduced, the careful and equitable distribution matured a fairly good crop on an exceptionally large area.

The year was free from widespread calamities. As usual in very dry hot weather, grass-hoppers and other insects did much damage to the crops on all the canals, and more especially on the newer ones. Boll-worm also damaged the cotton crops on the Lower Chenab and Lower Jhelum Canals where special remissions had to be given on that account. The quality of the wheat crop was, however, excellent and helped to make good the deficiency.

Areas irrigated. &c.

5. The areas irrigated and matured by works of all kinds compare as follows with the corresponding figures for the previous triennium and for the year 1914-15 :—

Particulars	Average of the three years ending 1914-15		During 1915-16.
	Acre.	Acre.	
<i>Imperial and Provincial.</i>			
Area irrigated	8,050,455	8,119,886	8,237,896
Area matured	7,667,893	8,067,258	7,805,703
<i>Native States.</i>			
Area irrigated	556,300	543,155	616,925
Area matured	552,637	510,507	613,284

Under Imperial and Provincial the area irrigated shows a decrease of 182,000 acres as compared with the year 1914-15, which was a record one. The figures are, however, an improvement over the average of the previous triennium, the increase being due mainly to the development of irrigation on the Upper Chenab and Lower Bari Doab Canals.

Excluding the Triple Canals, however, the area irrigated during the year showed a drop of 38,290 acres as compared with the figures for the previous year, the inundation canals alone being responsible for about half of this shortage.

The shortage of 401,673* acres, as compared with 1914-15, in the area irrigated during kharif was due partly to the bumper rabi crop of 1915, which took so long to harvest that it interfered with early kharif sowings, and partly to the very unfavourable season caused by the failure of the monsoon. The prevalence of plague on the Western Jumna and Sirhind Canals also prevented sowings of early kharif. The decrease was naturally more marked on the inundation than on the perennial canals.

The rainfall in September and October encouraged the cultivators to put in extensive rabi sowings to make good the loss in the kharif; a large area sown by rainfall had later to be matured by the canals. The result was that the area irrigated showed an increase of 323,412 acres over the figures of the previous year.

Financial Results.

6. The financial results are based not on the areas irrigated in kharif 1915 and rabi 1916 but on the areas of rabi 1915 and kharif 1915, water dues on account of which were realized within the financial year (1915-16). The gross receipts from works of all kinds compare as follows with the figures for

*Includes area irrigated in Native States.

the year 1914-15 and the two previous triennial periods ending 1911-12 and 1914-15 :—

Particulars.	AVERAGE OF THE THREE YEARS ENDING		During 1914-15.	During 1915-16.
	1911-12.	1914-15.		
	Rs.	Rs.	Rs.	Rs.
<i>Imperial and Provincial.</i>				
Major Works	2,43,69,364	3,40,31,764	3,45,62,445
Minor Works	17,47,219	18,57,540	18,61,250
Total	...	2,61,56,583	3,58,89,304	3,64,76,361
<i>Native States.</i>				
Major Works		17,17,265	25,21,876	22,85,777
Minor Works	23	8	1
Total		17,17,288	25,21,884	22,85,777
				24,89,804

On the Major Works the gross revenue was the second largest on record, the highest being the year 1913-14. This very satisfactory result was due to the record rabi of 1915, the revenue on which was collected during the year under review.

The working expenses for the year were unusually high, and compare as below with the similar figures of the annual averages of the two previous triennia and of the year 1914-15 :—

Particulars.	TRIENNAL PERIOD ENDING		During 1914-15.	During 1915-16.
	1911-12.	1914-15.		
	Rs.	Rs.	Rs.	Rs.
<i>Imperial and Provincial.</i>				
Major Works	80,25,908	80,39,131	93,21,149
Minor Works	10,43,544	9,51,01	9,77,821
Total	...	90,69,512	88,90,132	1,03,01,270
<i>Native States.</i>				
Major Works	7,98,757	9,11,511	8,18,591
Minor Works	4,084	6,051	3,703
Total	...	7,42,821	9,18,162	8,22,294
				9,28,965

Much of the increase was incurred on the improvement of the right bank river defence work at Khanki on the Lower Chenab Canal, special repairs and staunching of banks on the Upper Chenab and Lower Bari Doab Janals, the up-keep of the Upper Jhelum Canal which was open for irrigation during the year, and on torrent-training works on the Sirhind Canal.

The net revenue for the year compares as follows with that of previous periods :—

Particulars.	TRIENNIAL PERIOD ENDING		During 1914-15.	During 1915-16.
	1911-12.	1914-15.		
<i>Imperial and Provincial.</i>		Rs.	Rs.	Rs.
Major Works	1,62,83,366	2,50,92,638	2,52,37,996
Percentage on Capital	14·19	15·49	14·70
Minor Works	7,08,675	9,06,539	9,73,429
Total	...	1,69,87,041	2,59,99,172	2,62,11,425
<i>Native States.</i>				
Major Works	9,78,508	16,10,365	14,87,196
Percentage on Capital	6·40	10·49	9·52
Minor Works	— 4,041	— 6,943	— 3,703
Total	...	9,74,467	16,03,422	14,63,493
				16,59,339

Compared with 1914-15 and the triennial period ending 1914-15 the net revenue showed a falling off due partly to the decrease in the kharif irrigation already explained and partly to the increased expenditure under working expenses. Excluding the figures for the Triple Canals, the net revenue earned by the Major Irrigation Works amounted to Rs. 2,39,08,167, which gives 20 per cent on the capital invested (Rs. 11,90,06,780). The interest charges for the year amounted to Rs. 72,47,023, and the net profit after paying interest charges is Rs. 1,64,21,265 or 7·56 per cent. on the total capital outlay.

The percentage of net revenue on capital outlay on the principal canals was as follows :—

Canal.	Excluding interest charges.	Including interest charges.
Western Jumna	9·04	5·73
Sirhind	7·78	4·47
Upper Bari Doab	15·29	11·97
Lower Bari Doab	— 0·46	— 3·73
Upper Chenab	0·53	— 2·79
Lower Chenab	39·78	36·40
Upper Jhelum	— 0·79	— 4·12
Lower Jhelum	20·70	17·87
Upper Sutlej Inundation Canals	18·50	15·23
Sidhnai	51·55	48·18
Indus Inundation Canals	— 0·14	— 3·44

As usual the Upper Bari Doab Canal, the Lower Chenab Canal, the Lower Jhelum Canal, the Sidhnai Canal and the Upper Sutlej Inundation Canals continued to show excellent results. But it should not be forgotten that the high percentages on colony canals are due to the fact that they

get a book credit for most of the land revenue and "malikana" in addition to the ordinary water rates. The disappointing results on the Indus Inundation Canals are mainly due to the fact that the heads of these canals have to be changed frequently and require heavy expenditure to maintain.

The working of the Triple Canals (Upper Jhelum, Upper Chenab and Lower Bari Doab) continued to show a deficit. Irrigation on this system has developed more slowly than was anticipated in the project owing to the unforeseen delay in the opening of the Upper Jhelum Canal. That canal has now been opened and a rapid expansion of irrigation is confidently expected within the next few years.

General Remarks.

7. The estimated value of the crops raised on all canals for the year under review is Rs. 27,50,82,336 against Rs. 27,76,29,450 for the previous year. This gives an average of Rs. 32·4 per acre matured. It may be noted that this calculation is based on the prices given in the Season and Crop Report for 1915-16; these prices vary from year to year.

The length of channels in operation at the end of March 1916 was 18,805 miles viz., 4,332 miles of canals and branches and 14,474 miles of distributaries. Of these 128 miles of canal and branches and 144 miles of distributaries were opened during the year, mainly on the Triple Canal Project.

8. In the last year's review it was noticed that the Upper Chenab and Lower Bari Doab Canals commenced irrigating in 1912-13 and 1913-14, respectively. This year the Upper Jhelum Canal, the final link of the Triple Canal Project, was opened for irrigation on the 7th October 1915. Thus the year under review saw the completion of the great Triple Project, and the opening ceremony was performed at Mangla, the head-works of the Upper Jhelum Canal, on the 9th December 1915, by His Excellency Lord Hardinge of Penhurst, late Viceroy and Governor-General of India.

The completion of the Triple Project marks a new era in the history of the Punjab Irrigation, a history which, the Lieutenant Governor ventures to claim, is without parallel in any country for boldness of conception, success in execution, magnitude of results, and above all for the number of great Engineers whose technical skill, practical ability and devotion to duty have overcome all obstacles and combined to produce the 9 million acres of irrigation which is the most solid basis of the prosperity of to-day.

9. The general dislocation in the trade of the world which followed the outbreak of the war affected the agricultural conditions of the Punjab as of other parts of India. Owing to a drop in the export of cotton very low prices were realised for the crop of 1914, and this caused the area under that crop to fall from 1,069,676 acres in 1914 to 473,193 acres in 1915, i.e., by 56 per cent. This large decrease in cotton was partially compensated for by increase in maize, jowar and chari, and the high prices of food-grains generally compensated for the loss under cotton and caused an expansion of the area under wheat from 2,943,655 acres in 1914 to 3,041,248 in 1915.

10. In order to supplement the winter supplies of the Jhelum River for the use of the Triple and other canals, a project estimate for the construction of a barrage on the Wular Lake Outfall was prepared by Mr. R. E. Purves, O.I.E., late Chief Engineer, Irrigation Works, Punjab. It is now under consideration by the Government of India.

Another scheme to conserve the supplies of the Jhelum River is the construction of a storage reservoir on the Kahan Torrent near Rohtas, rainfall and other statistics for which are being collected, but the project, judging by the data so far collected, is not a promising one.

11. The supply of the Lower Bari Doab Canal having been satisfactorily arranged for by the transference of the surplus waters of the Jhelum through the Triple Canal Scheme, the waters of the Sutlej below its confluence with the Beas are available for the irrigation of the Sutlej Valley. Among other

schemes a project was prepared in 1913 for a weir 4 miles below the railway bridge at Ferozepore to serve two great cauals. The right bank canal was to take up the irrigation now done by the Upper and Lower Sutlej Canals and provide new irrigation in the Nili Bar, while the left bank canal was to serve the areas now irrigated by the Bahawalpur Sutlej Inundation Canals and to command new areas in Ferozepore District and the Bikaner and Bahawalpur States. This project is now being modified in accordance with orders received from the Government of India, based on the recommendations of the Inspector-General of Irrigation who, last cold weather, made an extensive tour over the land covered by the left bank scheme. The Lieutenant-Governor hopes that the new project when worked out will be found acceptable both to the Bikaner and Bahawalpur States and form the basis of a final agreement.

12. The extension of irrigation in the arid and frequently famine-stricken districts of Hissar and Rohtak has been the aim of more than one project. The proposal to store the excess summer supply of the Jumna by a dam at Koch was held to be impracticable owing to the enormous cost of a dam at such an unfavourable site : whilst the alternative proposal to add to the supply in the Western Jumna Canal by means of a Sarda-Ganges Jumna Feeder from the United Provinces has come to nothing, as it is represented that the surplus water of the Sarda is required for use in the United Provinces. A third and more promising scheme is now being investigated, involving a dam about 300 feet high at Bhakra on the Sutlej River, some 40 miles above the site of the head-works of the Sirhind Canal. This project will probably entail a second weir on the Sutlej some miles below Phillaur and a considerable amount of remodelling of some of the existing channels of the Sirhind Canal, which will be linked up with the Sirsu Branch of the Western Jumna Canal with possible extensions to the Bikaner State and the unirrigated areas round about Sirsa. The Western Jumna Canal, being thus relieved by the addition of part of the Sirsa Branch to the Sirhind system, would be able to irrigate certain unirrigated tracts of Hissar and Rohtak, which are peculiarly liable to famine.

13. The large variations in the supply obtained from the Ravi by the Sidhnai Canal with the consequent high percentage of failed crops, and the insecurity of supply to the Multan series of inundation canals, led to the framing of the Haveli Project. The essential feature is a weir across the Chenab River just below its junction with the Jhelum with canals on either bank. The canal on the right bank would take up new irrigation in the dry part of the Jhang District across the Chenab, finally tailing into the Karam Inundation Canal. The left bank canal would irrigate some of the unirrigated part of the Jhang District at the tail of the Lower Chenab Canal. But the upper part of this canal is a feeder principally, the major part of its supply being passed into the Ravi above the Sidhnai Weir to be used in the Sidhnai Canal and in the small inundation canals from the Chenab in the Multan District into which it tails. One of the main advantages of the scheme is to make the Sidhnai Canal independent of Ravi water, and so free the Lower Bari Doab Canal from its present obligation to pass beyond Balloki certain supplies which could be much more profitably utilised close at hand in Montgomery than in the far distant Multan District.

Experience of conditions at Haveli, when the Triple Canals are working full, is required before it can be confidently said that the Sidhnai Canal will not require help occasionally from Ravi water in certain seasons, and the project is under further consideration.

14. During the year, owing to the lack of canal closures consequent on the very dry season, but little progress could be made with the lining of channels to limit loss by seepage and percolation. Financial stringency too precluded all works but those urgently necessary. Nevertheless, on the Lower Chenab Canal measures were taken for the prevention of water-logging by the drainage of the water-logged tract in the vicinity of the town of Hafizabad with most satisfactory results, and restored to cultivation about 7,000 acres of rice lands that have been swamps for many years. There is good reason to believe that

the improvement effected is permanent, and that the swamps will not recur even in years of very heavy rainfall ; and the Lieutenant-Governor will be glad to see similar measures extended to other water-logged areas. Again, the Main Line Lower of the Upper Bari Doab Canal was lined with cement plaster.

15. The posts of Chief Engineer were held during the year under review by—

	<i>From</i>	<i>To</i>
Mr. F. E. Gwyther	... 1st April 1915	16th September 1915.
Mr. T. R. J. Ward	... 1st April 1915	31st March 1916.
Mr. F. C. Rose	... 17th September 1915	3rd March 1916.
Mr. W. F. Holms	... 4th March 1916	31st March 1916.

Mr. Rose has been promoted to the post of Secretary to the Government of India in the Public Works Department after a service of 30 years in the Punjab, during which his technical skill, administrative capacity, sound judgment and tactful methods of dealing with men and measures accomplished much for the development of the great irrigation system in the Province. Mr. Ward will also within a few weeks be leaving the Province which he has served so long and so well on promotion to the post of Inspector-General of Irrigation in India, and the Lieutenant-Governor desires to place on record his appreciation of Mr. Ward's brilliant talents as an Irrigation Engineer which have helped to solve some of the most difficult problems of hydraulic enterprise and have won for him a reputation in his profession that is not confined to the Indian Empire.

The administration of the Province cannot but be the poorer for the loss of two such distinguished officers, but the Lieutenant-Governor finds some satisfaction in the fact that, though called away to fill the two highest offices in the Public Works Department, their experience and ability will still be available in the solution of the many great questions of canal irrigation which still await decision in the Punjab.

16. In conclusion the Lieutenant-Governor desires to thank the officers of the Department as a body for their single-minded devotion to duty during a year of unusual strain, and to congratulate them on the signal success of their efforts towards maintaining the prosperity of the Province in conditions of exceptional difficulty.

By order of His Honour the Lieutenant-Governor,

W. F. HOLMS,

Secretary to Government, Punjab.

**ADMINISTRATION REPORT
OF THE
CANALS IN THE PUNJAB**
**FOR THE YEAR
1915-16.**

GENERAL.

1. The direct receipts and expenditure of the Irrigation Department during the year were as follows :—

CLASS OF WORKS.	Direct Receipts.	DIRECT EXPENDITURE.			Total.
		Capital.	Working expenses.		
Major Irrigation Works,	Imperial ...	2,37,97,171	46,64,222	1,03,43,170	1,50,07,392
	Contributions ...	82,221	58,854	5,08,854	5,67,708
Minor Irrigation Works.	Imperial ...	8,88,009	19	8,59,101	8,59,123
	Contributions ...	...	...	4,764	4,764
Provincial Canals	...	30,284	...	40,387	40,387
GRAND TOTAL		2,47,97,985	47,23,095	1,17,56,273	1,61,79,374
Average of the three years ending 1914-15.	*	2,55,74,433	1,01,36,585	98,05,827	1,99,42,412

* Includes "refunds of revenue."

2. The indirect revenue credited to the canals on account of Enhanced Land Revenue, etc., amounted to Rs. 1,17,60,597. The average credit on this account of the three previous years amounts to Rs. 1,03,80,159.

3. The following table shows the areas irrigated by the several canals in 1915-16 as compared with the averages of the previous triennium :—
 Area irrigated.

Names of canals.	Average of the three years ending 1914-15.			1915-16.
	Acres.	Acres.	Acres.	Acres.
<i>Major Irrigation Works.</i>				
Western Jumna Canal ...	{ Imperial	755,518	761,834	
	{ Patiala State	70,255	68,749	
Sirhind Canal ...	{ Imperial	893,812	927,059	
	{ Patiala, Nabha and Jind States ...	478,685	580,008	
Upper Bari Doab Canal ...	... ... ... ...	1,161,947	1,145,234	
Lower Bari Doab Canal ...	... ... ... ...	* 131,391	283,294	
Upper Chenab Canal ...	... ... ... ...	164,051	325,062	
Lower Chenab Canal ...	... ... ... ...	2,266,005	2,284,079	
Lower Jhelum Canal ...	... ... ... ...	816,460	884,176	
Upper Sutlej Canals ...	... ... ... ...	353,066	272,746	
Sidhnai Canal ...	... ... ... ...	278,544	270,150	
Indus Canals ...	... ... ... ...	239,595	235,641	
Total Major Irrigation Works. ...	{ Imperial	7,060,389	7,138,775	
	{ Native States	548,940	643,757	
<i>Minor Irrigation Works.</i>				
Shahpur Inundation Canals ...	{ Imperial	43,481	26,759	
	{ Provincial	31,011	18,894	
Ghaggar Inundation Canals ...	{ Imperial	26,156	22,006	
	{ Bikaner State	7,360	3,168	
Lower Sutlej Inundation Canals (including Hajiwah Canal) ...	... ...	301,353	283,572	
Chenab Inundation Canals ...	... ...	200,130	170,485	
Muzaffargarh Inundation Canals ...	... ...	379,916	377,395	
Ravi Inundation Canals (Provincial) ...	... ...	17,022	...	
Total Minor Irrigation Works. ...	{ Imperial	851,036	880,917	
	{ Provincial	48,033	18,894	
	{ Native State	7,360	3,168	
Total Major and Minor Irrigation Works. ...	{ Imperial	8,011,425	8,218,992	
	{ Provincial	48,033	18,894	
	{ Native States	556,300	646,925	
GRAND TOTAL ...		8,615,758	8,884,811	

* Average of two years only.

Financial Results.

4. The canals in the Punjab show the following results for 1915-16 :—

I.—CANALS IN OPERATION CLASSED AS PRODUCTIVE.

Major Works.

	Rs.
Capital expenditure { Direct charges	46,64,922
during the year. Indirect charges	1,56,167
	<hr/>
Total	48,20,389
	<hr/>
The capital invested to end of 1915-16 amounted to ...	21,09,51,484
	<hr/>
Income from all sources less refunds (Rs. 7,608) ...	3,45,89,804
Working expenses less refunds (Rs. 7,608) ...	<hr/> 1,00,31,510
	<hr/>
Balance excess revenue being 10·90 per cent. on Rs. 21,09,51,484...	2,36,58,288
	<hr/>
<i>Interest—</i>	<i>Rs.</i>
Total Direct outlay to 31st March 1916 ... 21,07,41,711	
Less half outlay during 1915-16 ... 23,32,111	<hr/>
	<hr/>
Mean Capital at charge 20,84,09,600	
Interest on Rs. 20,84,09,600 at 3·4725 per cent. ...	79,37,023
	<hr/>
Net profit after paying interest in 1915-16	1,64,21,265
Ditto ditto 1914-15	1,94,82,697
Ditto ditto 1913-14	<hr/> 2,05,01,885
	<hr/>

The earnings of the "9—Major Works" are shown in line 24 of the statement at pages 4 and 5.

II.—IMPERIAL CANALS, MINOR WORKS NOT CLASSED AS PRODUCTIVE.

No capital outlay was incurred during the year on those canals for which Capital and Revenue Accounts are kept, viz., Shahpur Imperial and Ghaggar Canals, except Rs. 19 incurred on the Ghaggar Canals. The total expenditure on such canals to end of year 1915-16 was, therefore, Rs. 5,92,043—

	Rs.
The income from all sources less refunds (Rs. 391) amounted to	18,48,928
Working expenses less refunds (Rs. 391)	<hr/> 9,04,623
	<hr/>
Balance profit in 1915-16	9,44,305
Ditto 1914-15	9,47,214
Ditto 1913-14	<hr/> 9,07,411
	<hr/>

The financial results of each Minor Work are shown in the body of the report.

III.—PROVINCIAL CANALS.

There are only two Provincial Canals in operation, viz., the Shahpur Provincial Canals and the Ravi Inundation Canals.

	Rs.
The income from all sources less refunds (nil) amounted to	37,629
Working expenses less refunds (nil)	<hr/> 43,336
	<hr/>
Balance profit in 1915-16	—5,707
Ditto 1914-15	26,215
Ditto 1913-14	<hr/> 35,054
	<hr/>

PARTICULARS.	Serial No.	CANALS IN OPERATION CLASSED AS PRODUCTIVE					
		Western Jumna Canal (including Sirs Branch).	Sirhind Canal (Imperial).	Upper Bari Doab Canal.	Lower Bari Doab Canal.	Upper Chenab Canal.	Lower Chenab Canal.
1	2	3	4	5	6	7	8
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—Capital (direct and indirect) outlay to end of 1914-15 ...	1	1,76,76,876	2,51,92,414	2,15,23,315	2,01,61,011	3,82,57,562	3,77,00,058
1915-16 ...	2	1,76,92,535	2,53,56,558	2,18,72,497	2,10,81,992	3,45,01,593	3,17,06,780
II.—Income realized during the year—							
Direct, viz., water rent and miscellaneous receipts. 1914-15 ...	3	30,15,615	38,94,584	39,46,701	4,91,360	6,21,064	84,93,508
1915-16 ...	4	27,75,981	31,37,789	41,03,676	4,32,511	9,56,236	84,47,760
Indirect, viz., land revenue due to Irrigation Works, including water advantage rate. 1914-15 ...	5	2,09,125	18,351	4,52,948	47,128	2,01,762	70,90,846
1915-16 ...	6	2,30,990	89,551	6,16,293	1,20,986	61,077	74,74,160
Total Direct and Indirect 1914-15 ...	7	32,24,710	39,12,935	43,90,619	5,38,489	8,23,826	1,55,86,354
1915-16 ...	8	30,00,351	32,27,319	47,18,960	5,53,497	10,17,333	1,59,22,210
III.—Charges (direct and indirect) for the year—							
Maintenance, including Establishment. 1914-15 ...	9	13,78,175	11,98,243	14,61,553	3,70,614	7,75,292	23,32,569
1915-16 ...	10	14,05,414	12,28,858	13,72,565	6,50,985	8,33,803	32,71,093
Interest on Capital outlay 1914-15 ...	11	5,88,990	8,18,057	7,26,137	6,67,318	11,05,183	10,73,969
1915-16 ...	12	5,83,986	6,11,273	7,27,555	7,22,171	11,40,972	10,76,007
Total 1914-15 ...	13	19,67,165	20,46,500	21,87,690	10,37,902	18,80,175	34,06,538
1915-10 ...	14	19,91,400	20,63,131	21,00,420	13,53,156	19,80,650	43,48,000
V.—Profit and Loss—							
(a) Including Interest on Capital outlay. Amount 1914-15 ...	15	12,57,575	18,66,638	22,11,959	-4,99,474	-10,51,649	1,21,79,816
1915-16 ...	16	10,14,031	11,44,209	26,18,519	-7,09,639	-9,63,314	1,15,74,210
Percentage on Capital outlay. 1914-15 ...	17	7.11	7.22	10.27	-2.47	-3.17	13.42
1915-16 ...	18	5.73	4.47	11.97	-3.79	-2.79	30.40
On Direct income ... Amount 1914-15 ...	19	10,37,410	26,96,341	21,65,118	1,20,716	-1,51,298	61,62,939
1915-16 ...	20	13,09,947	18,98,031	27,30,111	-2,18,474	-1,23,448	51,75,767
Percentage on Capital outlay. 1914-15 ...	21	9.20	10.53	11.55	0.55	-0.15	19.44
1915-16 ...	22	7.74	7.43	12.19	-1.01	0.35	16.28
On total income, Direct and Indirect. Amount 1914-15 ...	23	18,46,565	27,14,695	29,38,096	1,67,844	10,534	1,82,53,785
1915-16 ...	24	10,00,937	19,89,482	38,16,404	-97,438	1,33,525	1,26,50,247
Percentage on Capital outlay. 1914-15 ...	25	10.44	10.05	13.65	0.83	0.15	41.81
1915-16 ...	26	9.04	7.78	16.29	-0.48	0.53	39.78

*Figures differ from last year's report owing to the transfer of the Upper Jhelum Canal from

(1) Excluding Interest on Capital outlay.

MAJOR WORKS.					Total Productive.	IMPERIAL CANALS MINOR WORKS, NOT CLASSED AS PRODUCTIVE.		PROVINCIAL CANALS.		Serial No.	
Upper Jhelum Canal.	Lower Jhelum Canal.	Upper Sutlej (including Lower Sohng and Para).	Sidhuani Canal.	Indus Inundation Canals.		Works for which Capital and Revenue Accounts are kept.	Works for which only Revenue Accounts are kept.	Shahpur Provincial Canals.	Ravi Inundation Canals.		
9	10	11	12	13		14	15	16	17	18	
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
4,01,17,379	1,50,51,432	18,06,770	13,31,927	28,22,932	21,21,31,095	5,02,024	1
4,23,61,119	1,50,66,762	18,18,381	13,30,911	29,73,306	21,60,51,494	5,92,013	2
...	28,02,582	3,98,913	5,82,511	1,76,281	2,43,87,682	1,07,731	8,17,111	49,600	1,379	3	
6,234	26,49,440	4,79,016	6,20,450	1,66,918	2,37,97,471	84,024	7,93,375	29,902	322	4	
...	15,62,192	2,12,987	1,30,000	2,10,221	101,71,763	16,023	9,33,807	9,541	11,149	5	
...	11,72,313	2,67,057	2,08,319	2,50,227	1,07,02,319	15,107	9,41,312	6,437	888	6	
...	44,01,474	6,11,983	6,72,511	4,21,512	3,45,02,415	1,21,034	17,55,018	69,160	12,529	7	
6,234	41,21,783	7,46,103	8,32,770	4,97,175	3,45,99,401	1,09,731	17,32,187	36,359	1,270	8	
...	8,67,219	3,19,371	1,58,330	4,16,151	93,21,419	81,306	8,52,033	42,093	2,380	9	
3,43,150	8,17,559	4,00,708	1,46,592	4,11,591	1,00,31,510	66,000	8,15,723	40,953	2,383	10	
13,23,574	5,14,513	59,573	45,107	96,032	70,73,873	...	...	...	...	11
14,11,000	5,49,061	59,139	41,939	97,913	72,37,023	...	...	...	...	12
13,23,574	14,32,062	4,07,916	2,03,427	5,10,183	1,81,03,322	81,306	8,62,032	42,083	2,380	13	
14,11,000	13,55,620	4,69,146	1,91,130	5,89,497	1,81,68,539	86,000	815,723	40,953	2,383	14	
-13,23,574	29,32,412	2,03,091	4,69,117	-84,691	1,91,69,123	...	...	...	...	15
-17,46,923	27,68,263	2,76,957	6,41,319	-1,02,322	1,64,21,265	...	...	...	...	16
-327	1238	1129	3518	-300	856	...	...	...	...	17
-412	1737	1523	4518	-311	756	...	...	...	...	18
...	10,15,093	70,570	3,84,315	-2,37,870	1,50,63,413	24,425	-34,041	6,626	-1,001	19	
-3,35,016	18,31,591	69,333	4,76,858	-2,71,636	1,29,63,955	5,734	-2,98,192	-11,051	-2,001	20	
...	1201	270	2543	-313	710	412	..	..	..	21
070	1147	381	3522	-856	593	097	..	..	..	22
...	14,77,255	2,63,557	5,14,311	11,351	2,52,37,906	43,349	9,03,860	16,007	10,148	23	
-3,35,016	38,03,924	3,38,395	6,86,167	-4,400	2,30,38,280	20,541	9,23,164	-4,601	-1,113	24	
...	2180	1359	8801	040	2180	732	..	..	..	25
... 070	2070	1850	5185	-014	1020	352	..	..	..	26

Works under "construction" to "canals in operation," as being opened in December 1910.

Major Irrigation Works.

WESTERN JUMNA CANAL.

1. The expenditure (direct and indirect) amounting to Rs. 15,659 was wholly "imperial" and was incurred mainly on Capital account new rest-house at Anchra; subordinates' rest-houses at Tajewala and Janti and a new dispensary at Dadupur.

2. The expenditure amounted to Rs. 1,40,182 (Rs. 1,18,508 under "imperial" and Rs. 21,674 under "contribution") and was incurred in numerous small works for increasing the efficiency of the canal and in improvements to buildings.

3. Rupees 630,839 were expended (Rs. 6,03,861 under "imperial" and Maintenance and repairs. Rs. 20,978 under "contribution"). In addition to this Rs. 11,890 and Rs. 13,394 were also spent by the Patiala and Jind States, respectively, on the maintenance of their distributaries. Apart from the ordinary repairs and maintenance of channels and buildings, numerous works were carried out for increasing the efficiency of the canal and improving the banks of the channels. The silt berms which had been successfully formed by the basket-work-spurs at Dadupur, were protected by pitching at intervals, and the large silting reaches above Indri were maintained and worked during the year; also as those in the Main Branch and the Hansi Branch. A large sum was also spent on clearance of drains recently taken over from the Civil Department.

4. (a) *Kharif*.—The monsoon was very poor and the existing supply of Nature of seasons and state of demand fodder insufficient so that a great scarcity of fodder set in early in the crop in dry districts such as Rohtak and Hissar. Throughout the season up to half-way through September the monsoon was distinctly below normal. The canal was in flow for 165 days out of 183 days and was closed for 18 days only, which included 7 days for opening and 7 days for closing Badarpur silting reach. The demand was fairly keen throughout and supply sufficient. There were no high floods in the river, the highest gauge registering 25·0 feet at Paonta on the 17th August against the maximum recorded flood of 38·5 on the 14th August 1903.

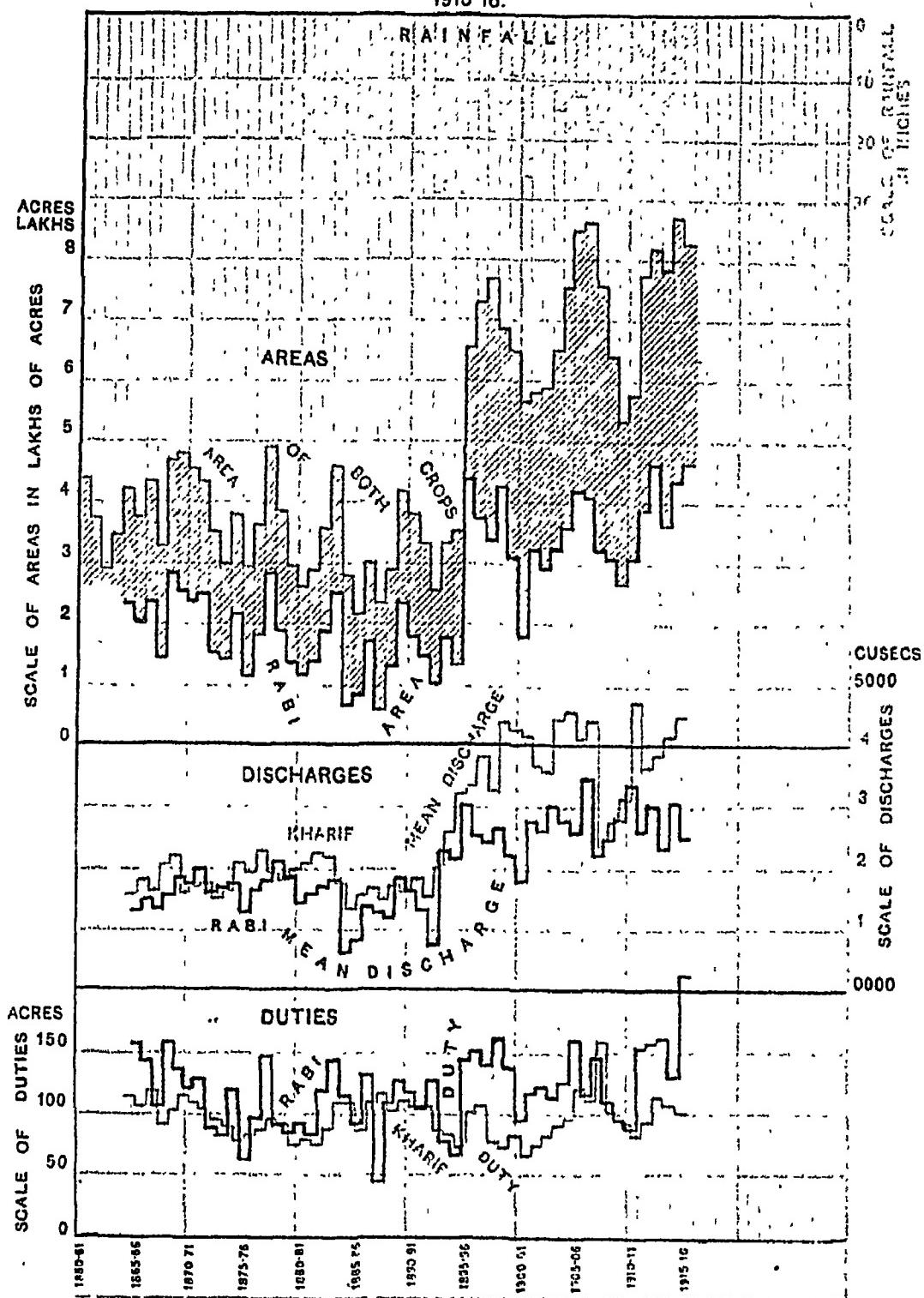
(b) *Rabi*.—There was good rain in the last fortnight of September which induced a large amount of rabi sowings, the sowings originally put down as *barani* largely came under irrigation later on owing to the failure of the winter rains. The demand was very keen but the supply in the river was the lowest on record. The average supply in January was 300 cusecs below the average for the last 15 years, 500 cusecs below it in February, and 1,000 cusecs below it in March, and it was with great difficulty that the crop which was the second largest on record was matured at all. The canal could not be closed at all during the season and remained in flow for 183 days. The lowest supply in the river occurred on 30th March 1916 and was 2,167 cusecs; the lowest ever recorded.

(c) *Rainfall*—The following table compares the rainfall during the year with that of the previous year:—

Station.	RAINFALL IN INCHES IN	
	1914-15.	1915-16.
Paonta	92·5	60·0
Tajewala	80·8	36·4
Indri	41·8	20·1
Munak	27·0	11·1
Delhi	31·2	15·5
Karnal	36·4	21·0
Dadupur	58·86	24·8
Hissar	18·65	5·7
Rohtak	22·00	6·5

// WESTERN JUMNA CANAL.

WORKING RECORD.
1915-16.



N. B.—The intercepts in the red area show the Kharif acreage each year.

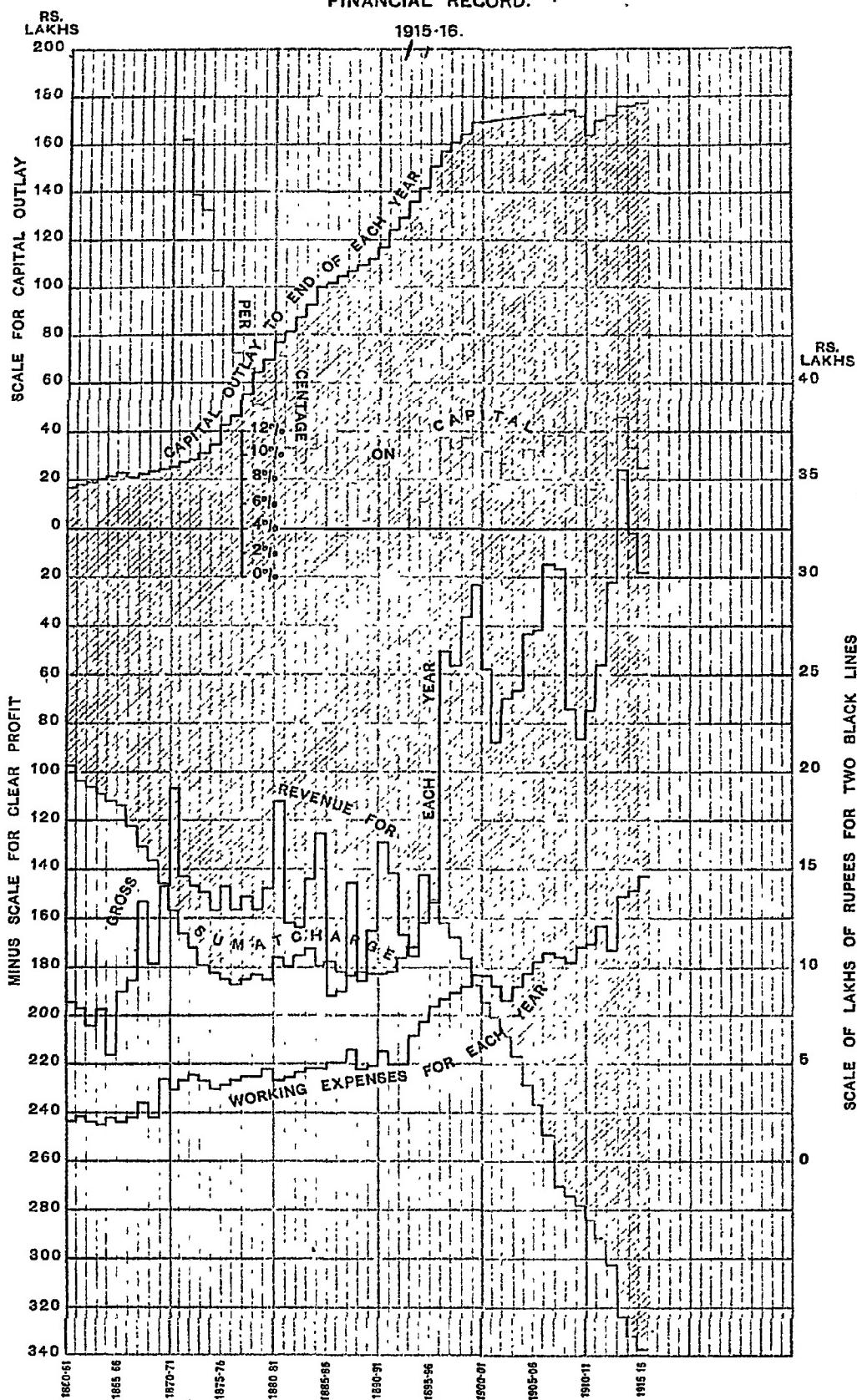
The areas shown include those done in Patiala State on Sirsa Branch

The discharges are as measured at canal head, and are averages utilised for the whole of each crop.

The duties are derived from the above areas and discharges.

WESTERN JUMNA CANAL.

FINANCIAL RECORD.



*N. B.—*This diagram does not include figures for Patiala State on Sirsa Branch; it is "Imperial" only.

The intercepts in the blue area are measures of the accumulated clear profits of the scheme; and if measured on the minus scale the readings are clear profits after reimbursing the whole of the capital expenditure.

This canal was taken over in the early half of the 19th century without the expenditure of any capital; there has therefore never been any arrears of interest, and the sum at charge has never been greater than the capital. In 1900-01, it will be seen that the whole capital had been repaid, and about 194 lakhs in addition as clear gain.

No interest on this clear profit has been allowed for, so that the gain is more than shown.

The intercepts between the black lines show the net revenue each year.

The sudden rise in 1896-97 of gross receipts was due to a famine year, but has been continued since owing to large extensions.

5. The following table compares the irrigation effected during the year with the averages of the two previous triennia :—

Area irrigated.

Crop.	AVERAGE FOR THE 3 YEARS ENDING.		<i>Area irrigated during 1913-16.</i>
	1911-12.	1914-15.	
Kharif	...	808,782	301,273
Rabi	...	325,166	463,803
Total	..	633,906	895,076

The area irrigated shows a distinct improvement over previous years, and this was due to the recent improvements in channels and scientific designing of them. The decrease in the Kharif was due to the fact that the zamindars were advised by the Civil Department not to put down cotton as there would be difficulty in disposing of it owing to the general dislocation in trade which followed the outbreak of the war. The area under cotton was, therefore, one lakh acres less than usual. The rabi of 1914-15 was a bumper one having only been exceeded on two previous occasions. After reaping it the zamindars did not trouble much about putting down said rabi crops. There was a heavy death roll from plague and in some areas cholera was prevalent. Had it not been for this the total area of irrigation of the year would probably have far exceeded previous records. The rabi irrigation, in spite of extraordinarily low supply in the river and total failure of the winter rains, was the second highest on record ; being 463,803 acres against the recorded maximum of 471,533 acres in 1912-13.

6. The receipts amounted to Rs. 52,266 and maintenance charges to Rs. 5,153 showing a nominal profit of Rs. 47,113 against Rs. 59,244 in 1914-15 and Rs. 56,410 in 1913-14. The navigation receipts are almost wholly due to the rafting traffic from Tajewala to Jagadhri Railway Station. Navigation in the Delhi and Hansi Branch, except for rafts, was closed from April 1915 and the result was very beneficial to the canal in general by permitting of better design of channels. No boats are now plying for hire on the canal.

7. *Imperial.*—The gross revenue collected amounted to Rs. 30,06,351 which is less by Rs. 2,28,775 than the average financial results based on collection for the triennium ending 1914-15. The decrease is due to decrease in kharif irrigation.

The working expenses amounted to Rs 14,05,414, which is Rs. 1,09,614 more than the average of the previous triennium. The increase was due to heavy expenditure on silting reaches and improvements to banks of channels and clearance of drains recently taken over from the Civil Department.

The net revenue amounted to Rs. 16,00,937 against Rs. 19,39,327, the average of the previous triennium and Rs. 18,46,565 of the previous year.

Contribution.—The net revenue received by the Patiala State on their channels on the Sirsa Branch amounted to Rs. 148,296 or 12.77 per cent. on the capital cost invested, against an average of Rs. 1,53,906 or 13.38 per cent. for the triennium ending 1914-15, and Rs. 1,34,437 or 11.58 per cent. for the year 1914-15.

8. (a) Agricultural and other conditions of the year.—The canal was in flow for 348 days and remained closed during the *kharif* for 18 days only. The rainfall was insufficient and considerably below normal. The monsoon was a very poor one and the winter rains failed almost entirely. The area remitted amounted to 6,184 acres during *kharif* and 12,630 acres during *rabi*, giving percentages of 1.71 and 2.72 acres, respectively, on the area irrigated, against 4,168 acres for *kharif* and 1,188 acres for *rabi* giving percentages of 0.95 and 0.27, respectively, in the previous year. The *rabi* crop was poor in quality. The year from an irrigation point of view was not favourable owing to deficiency of rain and low supply in the river.

Throughout the year water was given free of charge to village tanks as usual and this benefit is greatly appreciated in rainless areas such as Sirsa, Hissar and Rohtak. This year the benefit was specially felt as most village tanks dried up, completely, early in March, owing to the failure of the winter rains, and there would have been no water for the cattle or for domestic purposes in general if it had not been supplied by the canal and the mortality among cattle would have been great. In most villages the *zamindars* risked damage to their crops so as to get water for their tanks. In the dry districts of Sirsa, Hissar and Rohtak and also in Jind and Patiala States there was great scarcity of fodder from January onwards, and it was imported into these districts by rail at Government expense.

The area thrown out of cultivation by swamping along the lower reaches of the Main Line is being gradually improved by the costly silting reaches which have now been formed to protect it and a great deal of the Indri silting reach is now under crop, and the crops extend right up to its outer bank. The benefit from the canal to the land alongside the upper reaches of the Main Line is very great and enables several thousand acres of sugarcane to be grown annually on percolation water for which no water-rate is charged.

The value of crops assessed to water-rates on the canal amounted to Rs. 3,17,84,049 which shows that the canal is a very valuable asset to the country.

(b) Nature and scope of contemplated new works and progress made on the preparation of new projects.—(i) The proposals for a high dam across the Jamuna at Koch were finally abandoned by the Government of India as the rock was not of sufficiently good quality.

“(ii) A fresh design and estimate for a new level-crossing of the Somb Torrent at Dadupur amounting to about 15 lakhs of rupees were submitted to the Government of India. The site selected was a different one from former proposals. The Government of India have since returned the estimate with instructions to recast the same.

“(iii) Proposals and estimates for remodelling the Headworks at Tajewala were under consideration.

“(iv) Proposals for substituting Canal Minors for the direct water-courses near Tajewala were investigated.

“(v) Proposals for dealing with the Closed Drainage Area of Karnal District were under consideration.

“(vi) A project for substituting a *kharif* distributary for the present Lower Chautang Canal was under investigation.

(c) Interesting facts relating either internally or externally to the canal.—Capacity statements for the whole canal, which have been under consideration.

for the last three years, were finally accepted by the Chief Engineer, the Commissioner, Ambala Division, and the Chief Commissioner, Delhi Province. These statements, which place the area proposed to be irrigated annually on a percentage basis of the area commanded in various zones on the canal, should greatly improve the working of the canal.

Navigation on Delhi Branch and on Hansi Branch below Jind was abolished from the beginning of the year. This will enable the Delhi tail distributary and the Hissar distributary to be put in proper order and make them more suitable for irrigation requirements.

The question of garden irrigation in the neighbourhood of Delhi was taken up as excessive irrigation was causing insanitary results. In consultation with the Chief Commissioner, Delhi Province, the discharge allowed for the area in question was reduced to about one-half the amount formerly given.

The drainages within the canal area in the Karnal and Rohtak districts and Delhi Province were finally taken over from the District Boards in consultation with the Civil Department and will, in future, be maintained under the supervision of and at the expense of the canal.

A temporary Division was formed for six months to work up the projects for (a) Koch Dam and (b) Remodelling works at Dadupur and Tajewala.

Special proposals and estimates were prepared which are now under consideration.

Steady progress was made in remodelling all channels into more scientific sections and in revising their capacities to the actual discharges required throughout.

Owing to the advice given to the *zamindars* that cotton would not pay owing to the war, an attempt was made to reintroduce indigo on the canal. The attempt was on a moderate scale but about 15,000 acres of indigo were expected. The seed obtained from Bengal, however, failed to germinate and consequently only a few thousand acres of it were put down and these were afterwards mostly re-sown with other crops. Formerly indigo was cultivated in Karnal and Delhi only and the *ruts* are still in existence and it was intended to have them repaired and brought into use again. The experiment will, however probably not be proceeded with.

The war has stimulated the manufacture of saltpetre within the canal area, but this did not start till near the end of the year and was much handicapped by the extraordinary insufficiency of water for the time being.

Irrigation in Patiala State.—The irrigation in the Patiala State from the Sirsa Branch was 34,804 acres in *kharif* and 28,533 acres in *rabi* or a total of 63,337 acres exclusive of 304 acres remitted in *kharif* and 108 acres remitted in *rabi*. The average area assessed for the two previous triennia was 70,001 acres and 57,888 acres, respectively.

Irrigation in Jind State.—The supply which the Irrigation Branch has undertaken to allow the Jind State is 353 cusecs in order to irrigate an area of 60,000 acres in the year. The irrigation done, amounts to 57,857 acres or a decrease of 7,123 acres or 10·9 per cent. when compared with that of the previous triennium. The *kharif* area is 10,095 acres less than that of last year owing probably to less cotton being sown, but the *rabi* area is greater by 2,972 acres. The average areas irrigated during the two previous triennia ending 1911-12 and 1914-15 were 50,778 acres and 64,058 acres, respectively. Besides the area recorded above, the Jind State gets an average of 2,300 acres of irrigation from the Butana Branch which is assessed at the water-rate prescribed for British areas on the Western Jumna Canal. The maintenance, management and assessment connected with all Jind distributaries are in the hands of Jind State officials.

The following table shows the working of the Jind State distributaries as reported by the State :—

Particulars.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.
<i>Receipts.</i>					
Occupier's rate	2,61,232	2,60,491	2,84,720	2,88,998
Miscellaneous	2,121	5,022	5,360	5,053
Total	...	2,63,103	2,65,513	2,90,080	2,94,081
<i>Working expenses.</i>					
Establishment	6,513	9,414	7,561	7,817
Other expenses	25,003	24,096	27,258	28,363
Occupier's rate paid into British treasury	...	1,19,641	1,12,356	1,31,000	1,31,000
Total Working Expenses	...	1,51,230	1,76,766	1,65,810	1,67,182
Profit or loss	...	+1,12,153	+69,747	+1,21,261	+1,26,699
					+97,559

The above account shows a profit of Rs. 97,559 against a profit of Rs. 1,26,699 in the previous year.

Irrigation in Bikaner State.—This canal has also to irrigate 460 acres annually in the Bikaner State from the tail of Ilissar distributary. The areas actually irrigated amounted to 483 acres in *kharif* and 85 acres in *rabi* or a total of 568 acres against 421 acres in *kharif* and 517 acres in *rabi* of the previous year. The *rabi* area was short because of the difficulty in getting the supply down to the tail owing to the very keen demand.

Irrigation in the Kalsia State.—The irrigation in Kalsia State from Main Line of the canal was 696 acres in *kharif* and 779 acres in *rabi* or a total of 1,475 acres exclusive of 25 acres remitted in *kharif* and 18 acres remitted in *rabi*. The average area assessed for the last 3 years has been 743 acres in *kharif* and 889 acres in *rabi* or a total of 1,632 acres.

SIRIIND CANAL.

1. (a) *Imperial.*—The expenditure (direct and indirect) amounted to Rs. 61,144 and was incurred on completing the Capital Account. New Divisional Office at Rupar, the Girder Cart Bridge at Khatani (R. D. 166,460 Main Line,) and collecting materials for the bridges at Bul, R. D. 34,810 and Saholi R. D. 94,250 Abohar Branch.

Charges in England were also made on the Stoney Gates for the Rupar Undersluices and Lock Channel, but owing to the war the material did not arrive in time to enable erection to be done.

(b) *Contribution.*—The expenditure of Rs. 58,854 under this head represents mainly the share borne by the signatory states of the expenditure incurred on the headworks and Main Line.

2. (a) *Imperial.*—The expenditure amounted to Rs. 1,34,408 against Rs. 1,09,420 in 1914-15, and was incurred mainly on the completion of the wire ropeway over the weir at Rupar, building a new Telegraph Office at Maholi, additional accommodation for servants and stables at various rest-houses, improving distributary head regulators and raising sunken bridges. Altogether about 17 such works were carried out.

(b) *Contribution.*—The expenditure was Rs. 1,69,359, of which Rs. 1,39,314 represents seigniorage charges and the balance is the share of expenditure at the Headworks and on the Main Line; as also the cost of additions to some rest-houses and out houses at Dhaneta.

3. (a) *Imperial.*—The expenditure was Rs. 4,19,363 against Rs. 4,18,408 in 1914-15. The most important repair works carried out were—digging of the outfall channel, Siswan Torrent; repairing spurs, Budki Torrent, concrete slab experiments at Rampore; and raising and strengthening banks, silt clearance, etc., of several distributaries; all the above being in addition to the ordinary maintenance and repairs of channels.

(b) *Contribution.*—The expenditure was Rs. 1,42,934 against Rs. 89,413 in the previous year, and represented the cost of the usual maintenance charges and a share of the expenditure on the Headworks and Main Line which was heavy, and accounts for much of the increase above.

4. (a) *Kharif.*—The canal was in flow for 171 days. The demand in the early part of the season was slack to moderate owing to the very heavy *barani* rabi of 1914-15 which had to be harvested. In July and August the demand was intensely keen owing to the failure of the monsoon and continued so till the middle of September when there was widespread, and general rain of fair intensity which reduced the demand.

The supply was ample.

(b) *Rabi.*—The canal was in flow throughout the season. Owing to late rain in September the river remained full and rotational turns did not begin till 1st November. The supply fell gradually and remained low throughout January, February and March. There were no winter rains and little snow on the lower ranges so that there was no rise in the river. The shortage of canal water was considerable, and as there was little or no rain to help, the failures on British Branches was 4·51 per cent. which was fairly good. This was, however, due to excessive irrigation as the area was the second best on record, second only to the rabi of 1911-12, and if the people had only been content with a fair amount of area the failures would not have been so heavy.

(c) *Rainfall.*—The mean rainfall of the year over the irrigated tract in each district is compared in the following statement with the average mean of 32 years:—

District.	Crops.	RAINFALL.		Percentage of actual to average of 32 years.
		1915-16.	Average of 32 years.	
Ludhiana	Kharif 1915	7·69	15·56	48 %
	Rabi 1915-16	1·45	3·28	
	Total ..	9·14	18·84	
Terozepore	Kharif 1915	3·89	11·48	38 %
	Rabi 1915-16	1·39	2·10	
	Total ..	5·28	13·67	
Native States	Kharif 1915	6·61	15·05	42 %
	Rabi 1915-16	1·05	3·06	
	Total ...	7·66	18·11	

It will be seen that the rainfall was much in defect everywhere. In the critical period, December and January, when rain was required to assist "Kor" waterings there was no rain whatsoever.

5. The following table compares the irrigation effected with the averages of the two previous triennia :—
Area irrigated.

Crop.	AVERAGE OF THREE YEARS ENDING.		1915-16.
	1911-12.	1914-15.	
	Acres.	Acres.	Acres.
<i>British Branches.</i>			
Kharif ...	205,491	337,234	392,862
Rabi ...	505,678	556,578	634,197
Total ...	711,169	893,812	927,059
<i>Native States Branches.</i>			
Kharif ...	122,533	185,659	209,062
Rabi ...	251,900	293,026	370,946
Total ...	376,623	478,085	580,008
<i>British and Native States Branches.</i>			
Kharif ...	328,024	522,193	501,924
Rabi ...	730,768	819,604	1,005,143
Total ...	1,087,792	1,372,497	1,507,007

The gross area for the year was the second best on record, the highest being in the year 1911-12 when 1,609,458 acres were irrigated followed by 1,486,782 acres in 1912-13. The area for the year is in excess of the average of either triennia.

Taking the crops separately, in kharif the area, in spite of the inauspicious start, eventually closed at 501,924 acres, the third highest on record, the kharif crop of 1914 being first with 555,208 acres and 1912 second with 521,939 acres. On British Branches alone there was a slight decrease compared with each of the previous four years and the good result was due to the Native States Branches which did the highest on record.

In rabi the total area was over a million acres, which only happened once before in 1911-12.

As compared with the figures of the previous year the kharif area was 9·6 per cent. short, whereas the rabi area was 38·15 per cent. more.

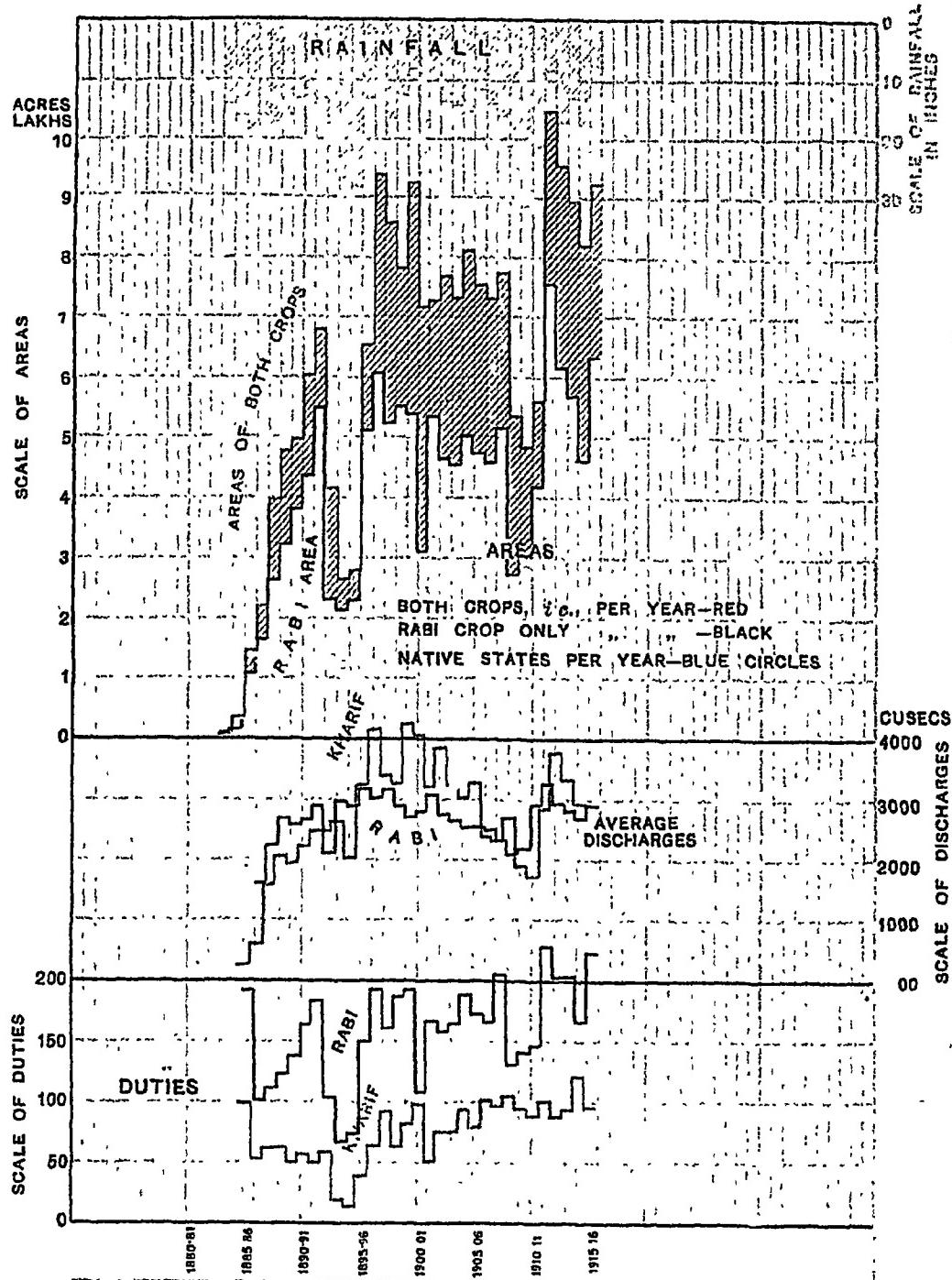
6. The details of traffic in tonnage and receipts is shown in this table :—

Particulars.		1914-15.	1915-16.
Tonnage carried ...	Mds.	35,470	31,249
Value of Tonnage... ...	Rs.	13,70,902	11,72,252
Toll receipts and raft dues ...	Rs.	19,085	17,030
Maintenance charges ...	Rs.	8,840	5,757
Number of passengers carried ...	No.	20,319	20,605

SIRHIND CANAL—BRITISH.

WORKING RECORD.

1915-16



N. B.—The intercepts in the red area give the Kharif acreage each year.

The small areas of 1892 to 1896 were partly due to silt difficulties, but chiefly to heavy rain. The working is more or less unsteady always.

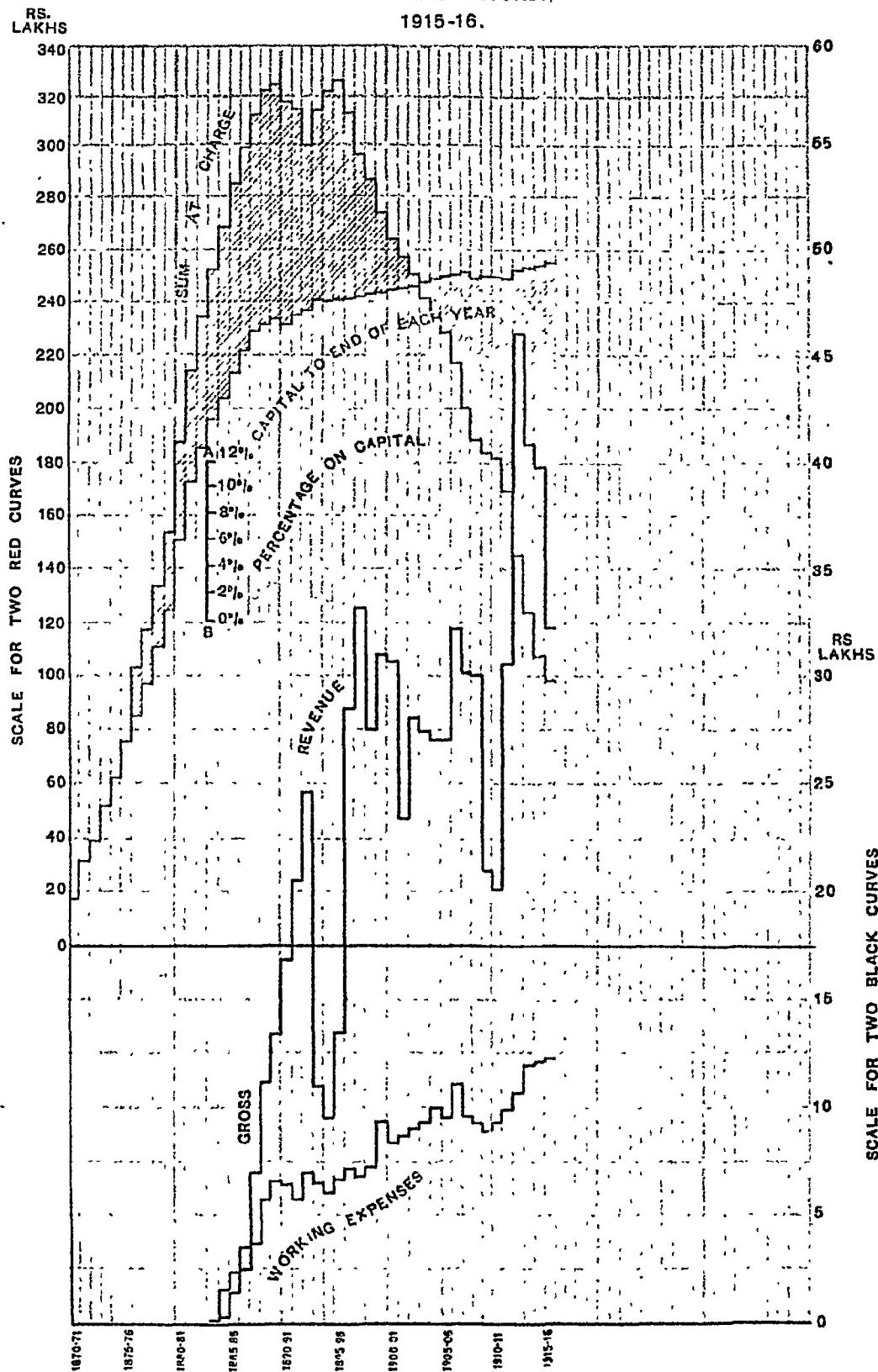
The discharges are measured in main line 26 miles from the head. Of the whole supply 36% goes to Native States, not included here; so that the discharges here shown are only 64% of the actual flow.

These States ought therefore to do areas equal to $\frac{2}{3}$ ths of those shown above. The actual areas done for both crops are shown for comparison by blue circle, and it will be seen that owing to less efficient management they have done less than half the British, instead of $\frac{36}{64}$ ths. In winter the whole river is taken in; in Kharif the supply is more than enough, but the demand is then always low.

SIRHIND CANAL—BRITISH.

FINANCIAL RECORD.

1915-16.



N. B.— The intercepts in the red area show arrears of interest which, added to the capital, give the sum at charge. Where the two red curves cross all such arrears were wiped off, and thereafter accumulated profits accrue, as measured by the intercepts in the blue area.

The scheme was begun about 1870 and opened in 1888-89. The lapse from prosperity shown in period 1893 to 1896 was partly due to silt troubles since overcome, and to exceptionally heavy rain.

The intercepts between the black curves give the net revenue.

No interest is charged on the arrears of interest, so the sum at charge is somewhat untrue.

There was a further reduction in maintenance charges this year and the net return higher than in either of the two preceding years, although the tonnage carried was less than in the previous year.

The net revenue earned on the British Branches amounted only to Financial Results based on collections. Rs. 19,88,482 equivalent to 7·78 per cent. on the capital invested. This compares unfavourably with the figures of the previous years and is due to—

- (a) the very poor rabi area of 1914-15 (revenue of which was collected in 1915-16), which was the lowest since 1910-11;
- (b) an uncollected balance of Rs. 1,35,496 out of which Patiala State was responsible for no less than Rs. 1,29,379.

The following table gives the amounts of occupiers' rates collected and balances uncollected :—

Year.	Collected.		Balances uncollected.	
		Rs.		Rs.
1913-14	37,57,080	13,564
1914-15	35,92,152	28,908
1915-16	28,00,268	1,35,496

The working expenses were Rs. 12,38,858 being Rs. 40,615 more than in the previous year. This excess is due to heavy maintenance charges on torrent works, and to a small capital expenditure entailing more establishment charges being debited to maintenance instead of to capital.

But owing to the very large area irrigated during the year the cost per acre of maintenance charges is only 1·34 per acre against 1·46 in the previous year.

Native State Branches—The following table compares the results of collections, assessment profits and area assessed with the previous year :—

Year.	AMOUNT OF REVENUE.		Area asses- sed.	PROFITS ON		
	By collec- tions.	By assem- bly.		Collection.	Assess- ment.	
				Rs.	Rs.	
1914-15	21,53,731	21,03,077	462,497	
1915-16	22,46,852	25,91,262	577,841	
More or less	+93,121	+4,90,285	+115,344	
				-0·21	+2·56	

The profits on "Collection" are low because of the poor rabi of 1914-15 (revenue of which was collected in 1915-16). On the other hand, profits on assessments will be high as the latter is on the very big rabi crop of 1915-16.

8. (i) (a) *Projects*.—The project for extension of irrigation to Maler Kotla State referred to last year received the approval of the Local Government, the limits of irrigation being the first drainage to the west of the Bhatinda Branch. This will entail the construction of two small distributaries; a detailed estimate is in course of preparation.

(b) The project for a dam and reservoir on the Sutlej River at Neila Gorge has now developed into a very large and comprehensive scheme. It

absorbs the smaller project for irrigating Tract A 9 in the Sirsa Tahsil. The general lines now are to relieve the lower portions of the Abohar and Bhatinda Branches by giving them a separate source of supply from a canal taking out from the Sutlej some 12 miles or so below Phillaur Railway bridge; this canal will have extensions into Bikanir and the greater part of Tract A 9. The water thus set free in the present Sirhind Canal System will be carried by means of a Feeder to Kaithal on Sirsa Branch of the Western Jumna Canal and this will take up the irrigation of the Branch below the junction with extensions into unirrigated tracts adjacent.

A special Project Division was sanctioned and has been at work since October last. The site selected for a Dam in the Sutlej has been favourably reported on by the Geological Expert and subsequently approved by the Inspector General. The water stored here will enable the scheme out-lined above to be carried out with not only an almost certain hope of financial success but a certain assurance of protection against drought in famine-stricken tracts.

(ii) *Effect of enhancement of water rates. Sugarcane.*—The cultivation of this crop is still stationary; only 1,071 acres were sown. The soil and climate of Ferozepore and Bhatinda Divisions appear to be unsavourable to this kind of crop, and it is not popular.

Cotton.—The area of cotton sowings fell from 23,435 in 1914 to 1,621 in 1915. The war is no doubt responsible for this; the drop in cotton prices at end of 1914 discouraged sowings, although there was a recovery in prices during the year.

Wheat—The area under wheat rose from 213,502 acres in 1914-15 to 299,013 in 1915-16.

(iii) *Agricultural conditions.*—The agricultural conditions were unfavourable for anything but canal sowings. The heavy *barani* rabi of 1914-15 and plague prevented sowings of early kharif; when the monsoon failed there was a sudden rush for fodder crops. Again, there being no *barani* kharif fodder crops large areas of rabi crop were put down on canal waterings. The results were favourable to the canal but bad for cultivators generally. Only a small area of oilseeds was sown on this canal—

	Acres.
British Branches ...	... 1,588
Native States Branches ...	... 6,289

The very dry year seems to have been beneficial in keeping down the plague epidemic.

There were heavy flights of locusts in August, but the damage was not excessive, only 225 acres needing remission.

(iv) *Interesting facts.*—The opening of the Project Division and the outline of the work to be done by it has already been touched on.

Proposals for another Division to take up parts of the too heavy Ferozepore Division and a part of the Bhatinda Division are under consideration but its actual formation may have to wait for less financially stringent times.

A scheme for a Railway to serve the Neila Dam site and tap the export of stone from the Nalagarh Quarries has also been suggested.

The material for the Stoney Gates to be erected at Rupar has been received and the work will be completed this winter.

Extensive experiments with concrete slabs were carried through during the year. It was proposed to line a length of the Main Line experimentally. This was approved and an estimate sanctioned. The work will be carried out this winter if a closure is possible.

UPPER BARI DOAB CANAL.

1. The expenditure (direct and indirect) on works, excluding suspense, amounted to Rs. 4,79,600 against Capital Account. Rs. 1,25,463 in the previous year, and was incurred on the following works :—Building Executive Engineer's Office at Gurdaspur; remodelling the Head Works at Madhopur; Hydro-Electric Installation at Amritsar; and lining the Main Branch Lower, with cement plaster. The sum of Rs. 4,79,600 includes Rs. 2,65,595 on account of expenditure in England.

The suspense account showed a credit balance of Rs. 1,30,448 against a credit balance of Rs. 44,589 in the previous year.

2. Expenditure amounted to Rs. 1,02,058 against Rs. 1,53,369 in the previous year and was chiefly incurred on—
Extensions and Improvements. extending the Crate Spur at Upper Training Works, Madhopur; constructing Lahore Cantonment Minor off-taking from Kaura distributary, Lahore Branch; outlets, and culverts Niaz Beg distributary; telegraph offices and signallers quarters at Sheikham and Mall; lining Government House distributary; remodelling Ghosal and Tarpai Drains; and bridges on Tarn Taran distributary.

Besides the above many bridges were remodelled in the 4th Division, Upper Bari Doab Canal, and expenditure was also incurred on extension of plantations.

3. Expenditure amounted to Rs. 5,36,636 as against Rs. 5,40,811 in 1914-15. In addition to ordinary annual maintenance and repairs. maintenance and repairs, expenditure was incurred on the following important works :—Works in the river at Madhopur; shingle clearance from the canal and river grouting Dhanna Weir; clearing Kahnuwan Swamp Drain; repairing and extending pitching, Main Line, Main Branch Upper, below Badian and Luliani Rapids; and raising and strengthening banks of the Amritsar and Raewind distributaries.

4. The total output of manufactures during the year amounted to Rs. 2,61,834 against Rs. 4,59,880 in 1914-15.
Central Workshop.

The principal work in progress was the Amritsar Hydro-Electric Pumping Scheme and this is now nearing completion. The expenditure upon this work amounted to Rs. 2,75,044 against Rs. 53,683 in the previous year.

The manufacture of munitions was also taken up by the shops later in the year. The work in the early stages was confined to the making of gauges for use at the various other shops which were to take up shell manufacture and about 900 gauges with a very close degree of accuracy were made.

For the purpose of manufacturing Howitzer shells a quantity of machinery, including 100 lathes, was obtained from private owners. By the close of the year under review about ten thousand shells were in hand.

Numerous petty jobs were also done for other circles of the Punjab Irrigation Department and Departments of other provinces; including 70 sets of rajbaha and 61 sets of minor, gates and gearings, and 50 winches without gates. Total castings of iron and brass amounted to 7,013 and 83 maunds, respectively.

The percentage charges realized on the value of work done was Rs. 1,04,581 against Rs. 1,16,481 for the previous year. These charges include percentages on those unfinished works, also, on which expenditure had been incurred in the previous year.

5. The following table compares the area irrigated during the year
Area irrigated. with the averages of the two previous triennia :—

Crop.	AVERAGE OF 3 YEARS ENDING		1915-16.
	1911-12.	1914-15.	
Kharif	Acres. 463,232	Acres. 550,379	Acres. 489,944
Rabi	595,109	611,508	655,290
Total ...	1,058,341	1,161,887	1,145,234

6. The mean rainfall is compared with the averages of the previous three years in the following table :—

District.	1915-16.		AVERAGE OF PREVIOUS THREE YEARS ENDING 1914-15.	
	Kharif.	Rabi.	Kharif.	Rabi.
Gurdaspur	16.29	2.21	29.60	8.02
Amritsar	0.61	2.99	19.51	6.01
Lahore	4.68	2.03	15.11	4.57

The monsoon was a very unfavourable one. It broke late and even then it was so weak, that it cannot be said, exactly, when it commenced.

In April 3 falls of rain occurred at Madhopur. In May no rain was recorded. In June only one fall of 0.4 inches occurred. In July, August and September it rained on 10, 17 and 11 days, respectively.

The months, October to March inclusive, were practically rainless. The total rainfall at Madhopur for the six months was only 3½ inches. During the year there were very few floods in the river Ravi and the highest gauge recorded at Mukesar was only 17 feet.

S The net income (direct and indirect) amounted to Rs. 33,46,404 equivalent to 15.29 per cent. on the capital invested against 13.65 per cent. of the previous year

Financial results based on collections The uncollected balance of occupiers' rates was Rs. 14,966 against Rs. 12,155 at the end of the previous year.

Remissions of water-rate amounted to Rs. 84,219 against Rs. 1,35,212 in the previous year. The area for which remission was granted was 22,859 acres against 28,331 acres in 1914-15.

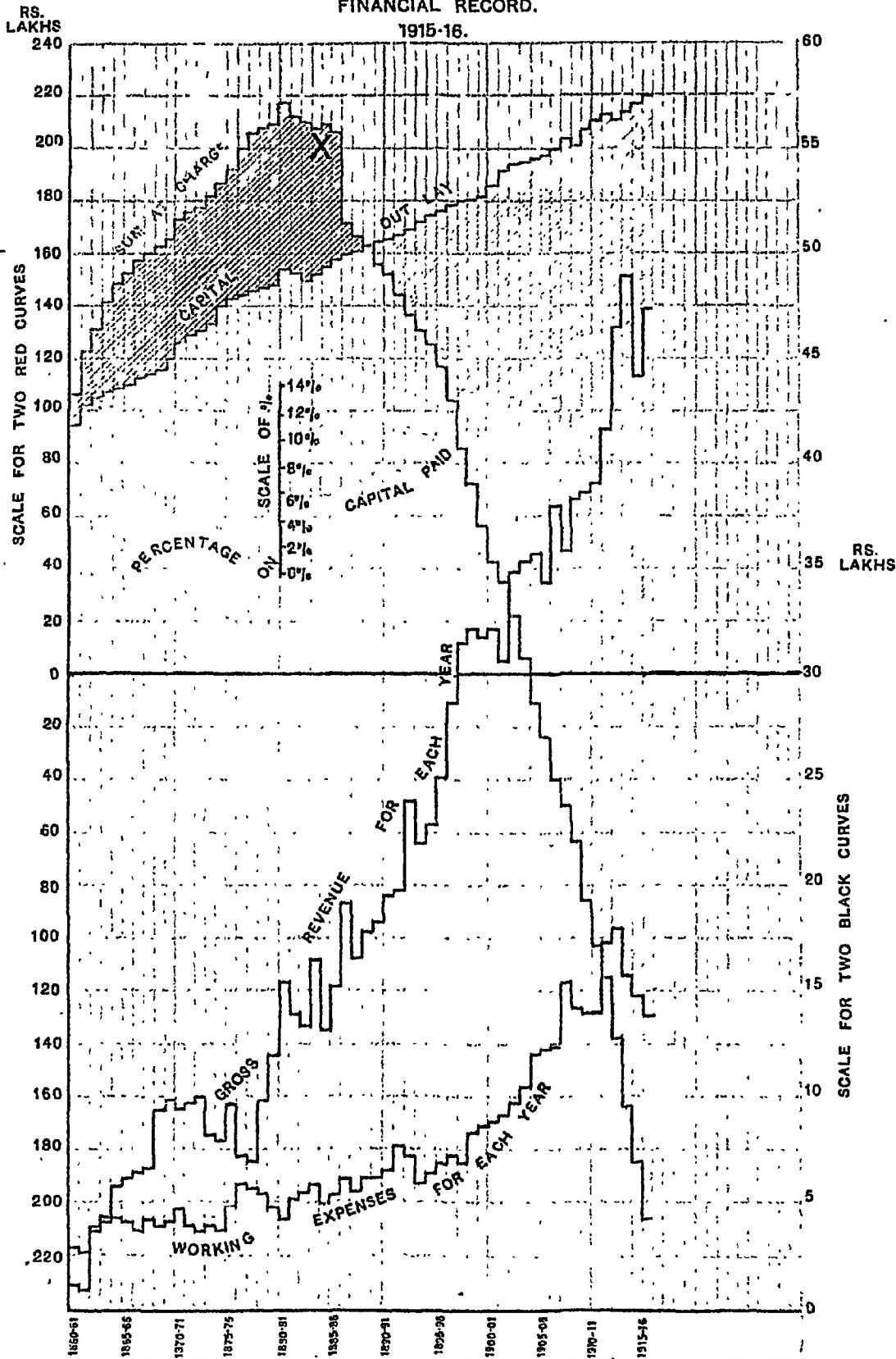
9. (a) Duty.—The average duty secured on the supply utilized was 83 acres in kharif and 263 acres in rabi as against 101 and 219, respectively, in the previous year.

General remarks. The canal was closed on 15th March 1915 and was reopened on the 7th April 1915. No other general closure was possible.

UPPER BARI DOAB CANAL.

FINANCIAL RECORD.

1915-16.



N. B.—The intercepts in the red area show arrears of interest unpaid up to end of each year, which being added to the capital give sum at charge.

The intercepts in the blue area give the accumulated profits. In 1904-05 the whole capital was reimbursed.

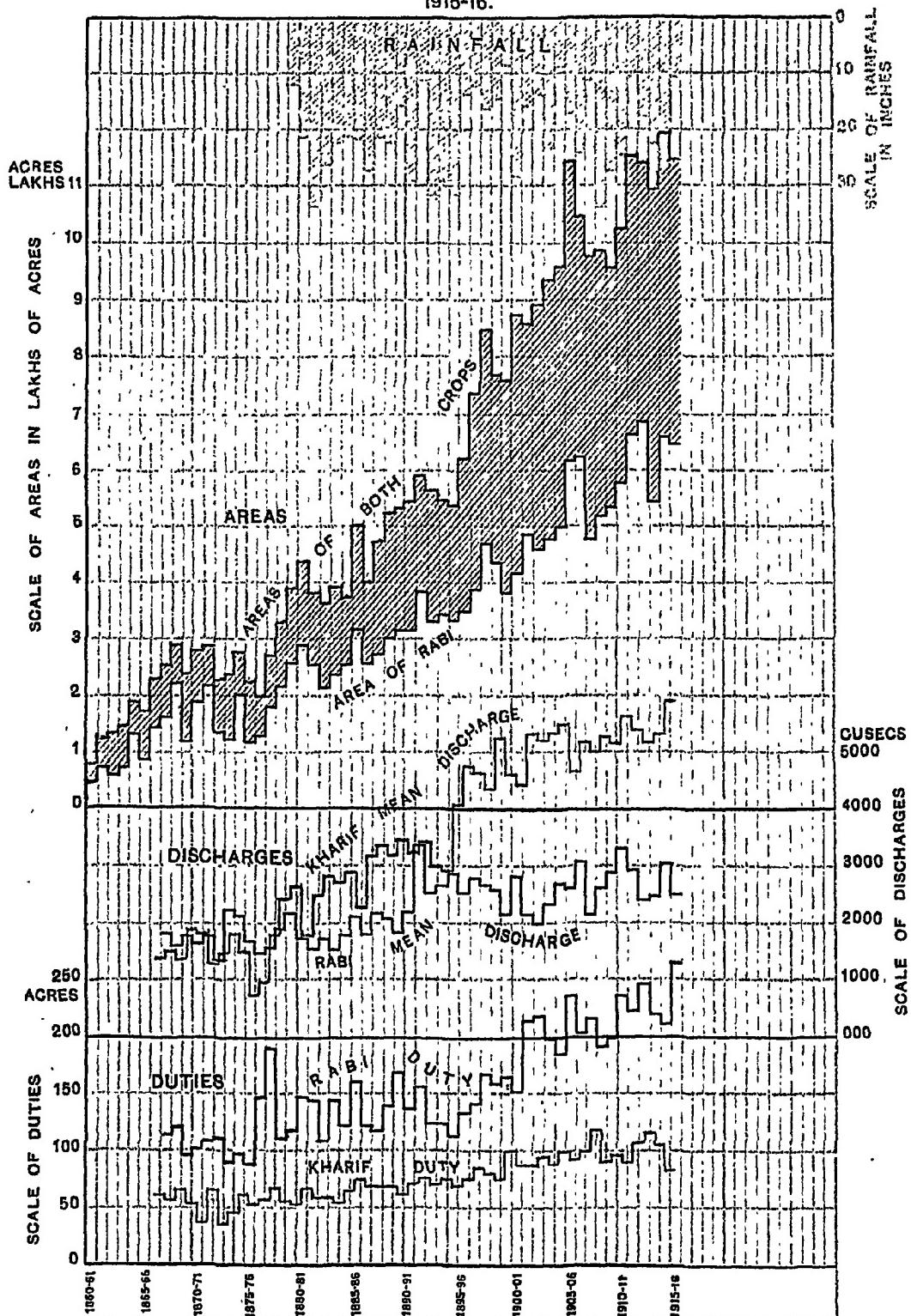
No interest is charged for the sums in the red area, so the diagram is rather distorted in this respect.

The intercepts between the black curves give the net income each year.

Remarks.—The sudden drop at X is partly due to a write-back of about 30 lakhs, but was continued by the rapid development of irrigation in the lower reaches of the canal. Up to 1888-89 the canal worked at a loss, since then it has been very profitable.

UPPER BARI DOAB CANAL.

WORKING RECORD.
1915-16.



*N. B.—*The intercepts in the red area show the Kharif acreage each year.

The discharges are measured at canal head and are averages for each crop.

The duties are derived from these areas and discharges.

Remarks.—The Kharif duty is fairly uniform and increasing slowly.

The Rabi duty is more irregular, due to variation in demand, but is increasing recently.

The Rabi supply decreased fairly steadily from 1891-92 to 1902-03, but nevertheless the areas increased owing to higher duty.

The Kharif supply has increased since 1894 very considerably, owing to the capacity of the canal being enlarged.

Usually the whole of the river winter supply is taken in for the Rabi crop, but after March and up to September the river supply is in excess of requirements.

(b) *Principal crops.*—The principal crops grown during the year are compared in the following table with those grown in the previous year :—

Name of crop.	1914-15.	1915-16.
	Acres.	Acres.
Wheat	2,03,879	244,185
Barley	7,158	6,251
Rice	61,063	72,719
Maize	48,689	86,517
Millets	12,912	45,997
Cotton	180,535	88,290
Sugarcane	28,963	29,361

The very large decrease in the area of cotton sown was probably due to a heavy fall in the price of cotton owing to the war.

This large decrease in cotton was partially compensated for by increase in maize and millets.

(c) *Agricultural conditions.*—In spite of the partial failure of the monsoon and the almost total absence of winter rains the agricultural conditions and results were fairly satisfactory. Owing to absence of rain, during the rabi, the "straw" was short but the grain outturn was better than might have been expected, and the year was, on the whole, a prosperous one for the cultivators.

There was little or no damage from insect pests.

(d) *Contemplated new works.*—The following are the most important works in prospect or in progress :

(1) *Remodelling Madhopur Outlet.*—Owing to the war, material did not arrive from England and thus no progress other than extending the masonry of piers was possible.

The work will, it is expected, be completed, during the coming cold weather.

(2) *Radial Arm Gates Madhopur Inlet.*—The gate erected towards the end of the cold season of 1914-15 worked satisfactorily and it is proposed to erect two gates of a slightly improved design during the coming winter season.

LOWER BARI DOAB CANAL.

1. The expenditure (direct and indirect) was Rs. 9,30,981 which brought Capital Account. the total amount debited to the Project at the end of the year to Rs. 2,10,81,992 against the revised project estimate of Rs. 2,23,28,402. The above includes a sum of Rs. 10,39,014 spent on water-courses, for which no provision was made in the project estimate as it is intended to recover this expenditure from the colonists.

The expenditure was incurred chiefly on the following works i.—

(a) "The main undertaking" noted in the report of the previous year, viz., "extending the floor of Balloki Weir" costing in all Rs. 2,92,948 was satisfactorily completed in June 1915. In addition to this "Painting Iron work in the superstructure of the Balloki Level-crossing" was completed in March 1916, at a cost of Rs. 5,779 and some useful experiments made in paints for steel work below water.

The balance of the expenditure under "works" was incurred in constructing various major and minor channels, flood embankments to keep out spills from the Ravi river, and the Deg Bund and Channel to lead the Deg Nallah floods into the Ravi instead of flooding the country to the west of the canal.

2. The only new work found necessary was an extension of No. 2 Down-stream Groyne of the Merala Weir; Extensions and improvements. this was undertaken to break up a cross-current that had set up along the face of the weir; the work was successful and justified the expenditure of Rs. 8,133.

The total expenditure incurred was Rs. 1,08,006; the bulk of this Rs. 87,822 was absorbed in clearing the liabilities of the work, completed last year, of extending the impervious floor of the Merala Regulator.

3. It might reasonably be expected that a comparatively new canal would cost little to maintain and keep in repair Maintenance and repairs. but this is not the case. Canal banks and flood bunds never cease to cause anxiety and are particularly expensive to maintain until they become settled and protected with an inner lining of silt berms. A large proportion of the annual expenditure under this head is incurred in repairing the damage caused by heavy rains; the monsoon of 1915-16 was, fortunately in this respect, a light one but still the expenditure was a little higher than in the previous year i.e., Rs. 3,92,123 against Rs. 3,78,889 many works that would have been carried out in years of normal conditions and provision of funds were postponed till better times.

4. The rainfall statistics given in the table below are correct indications of the dry nature of both the kharif and rabi seasons. During kharif, the River was, on the whole, much below normal and there were no high floods or long periods of high water level; the demand for canal water was necessarily keen but there was no difficulty in meeting it until the close of the season when it became intense for late sown rice crops.

The rabi season was remarkable on account of the absence of the usual Christmas rains: the river remained unusually low throughout; the Upper Jhelum Canal was not in a position to supply its quota from the Jhelum river, and consequently it was impossible to comply with the very keen demand.

The kharif crops were very fair and the rabi crops, assisted to some extent by well irrigation, were not much below normal. The area remitted during kharif was 3,612 acres and during rabi 3,497 acres giving percentages, on the areas irrigated of 2.32 and 2.15, respectively.

District.	1912-13.		1913-14.		1914-15.		1915-16.	
	Kharif.	Rabi.	Kharif.	Rabi.	Kharif.	Rabi.	Kharif.	Rabi.
Sialkot	14.0 -2.0	19.0 -2.0	25.0 -7.7	9.6 -1.7			
Gujranwala	11.7 -2.4	15.2 -2.4	20.0 -5.1	4.2 -0.9			

¹ Area irrigated.

5. The irrigated areas for both fasls are given below and compared with the figures for the preceding years :—

Years.	Kharif.		Rabi.	Total.
	Rs.	Rs.	Rs.	Rs.
1912-13	62,691	53,471	1,16,162
1913-14	1,23,882	40,928	1,64,110
1914-15	1,21,182	90,693	2,11,882
1915-16	1,59,152	1,65,910	3,25,062

The expansion has been steady but not so rapid as anticipated in the project forecast in which it was expected that an area of 500,000 acres would be irrigated in 1915-16; this failure to rise to expectations is largely due to the unforeseen delay in opening the Upper Jhelum Canal.

6. The gross receipts, working expenses and net revenue are given in the following table and compared with the previous years :—
Financial results based on collections

Year.	REVENUE		Total.	Working expenses.	Net revenue.
	Direct.	Indirect.			
1912-13	... 1,35,507	... Nel.	1,35,507	1,41,421	—5,914 .
1913-14	... 5,53,306	... 5,903	5,59,269	4,83,077	1,56,192
1914-15	... 8,24,064	... 2,01,762	8,25,826	7,75,292	50,534
1915-16	... 9,56,256	... 61,077	10,17,333	8,93,808	1,83,525

The total receipts anticipated in the project forecast amounted to Rs. 21,25,875 for 1915-16. This was, however, not possible to attain as the canal was working only in the kharif until the opening of the Upper Jhelum Canal. As the latter has been opened now a rapid expansion of irrigation is expected to follow next year.

7. The Deg Nallah, that crosses the Raya Branch system, the North-Western Railway and Grand Trunk Road near Muridke, and that used to flood the country west of the Main canal, was unusually quiescent and consequently the anticipated scouring out of the Diversion Channel, leading its flood water into the Ravi river, did not progress to any appreciable extent.

LOWER CHENAB CANAL.

1. The expenditure (direct and indirect) amounted to Rs. 96,722 bringing the total outlay to date to Rs. 3,17,96,780.
Capital account.
- The expenditure incurred was mainly in connection with measures for the prevention of water-logging.

2. Considerable expenditure was incurred the sum being Rs. 9,80, 508 compared with less than a third of that figure (Rs. 3,03,281) spent in the previous year. The main work—one which could not be either delayed or undertaken piecemeal—was the improvement of the right bank river defence works at Khanki. Expenditure was also incurred (i) in improving the drainage of the water-logged tract in the Hafizabad Division and (ii) in remodelling distributary channels throughout the Circle, replacing the old type of barrel outlets with the Kennedy semi-module, or gauge outlet, intended for the rateable distribution of water.

3. Expenditure was normal and amounted to Rs. 9,95,947 compared with Rs. 8,52,533 of the previous year. The increase was occasioned by special repair work on the Khanki weir.

4. The year under report was abnormally dry in both crop seasons.

Nature of seasons and state of demand and supply. As it will be seen from the rainfall statement below, the total kharif rainfall over the whole canal was $2\frac{1}{2}$ inches and the rabi less than one inch. With these adverse conditions, the kharif area naturally diminished by nearly half a lakh of acres, and the rabi crop, which started with an area of sowings larger than the previous year, had eventually to be given special remissions. On the whole, however, the canal passed through this severe ordeal with credit though not without the utmost concern and effort on the part of both the canal staff and the irrigators.

Rainfall.

Mean.		Lyallpur District.	Jhang District.	Gujranwala District.
Kharif 1915	...	1.72	1.88	3.94
Rabi 1915-16	...	.56	1.04	1.21
Total	...	2.28	2.92	5.15
1914-15	...	16.83	13.39	20.73
1913-14	...	12.34	12.4	17.87
1912-13	...	8.01	9.77	15.54

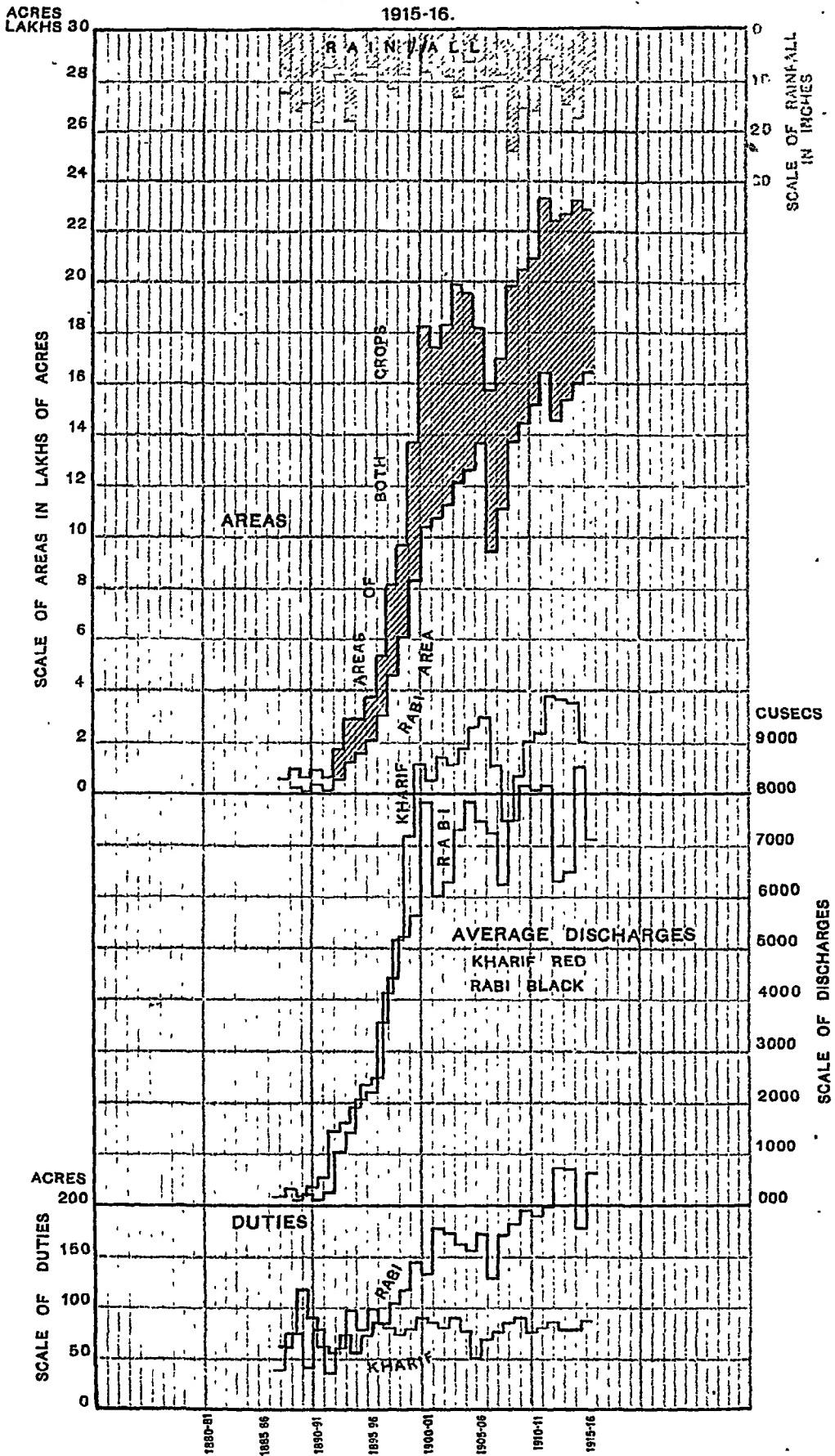
5. The following table compares the area irrigated with the averages of the two previous triennia :—

Crop.	AVERAGE OF THE 3 YEARS ENDING		Irrigated 1915-16.
	1911-12	1914-15.	
	Acres.	Acres.	Acres.
Kharif	683,678	724,862	652,142
Rabi	1,570,416	1,541,143	1,631,937
Total	2,254,094	2,266,005	2,284,079

LOWER CHENAB CANAL.

WORKING RECORD.

1915-16.



N. B.—The intercepts in the red area show the Kharif acreage each year.

The discharges are measured at canal head and give averages for each crop.

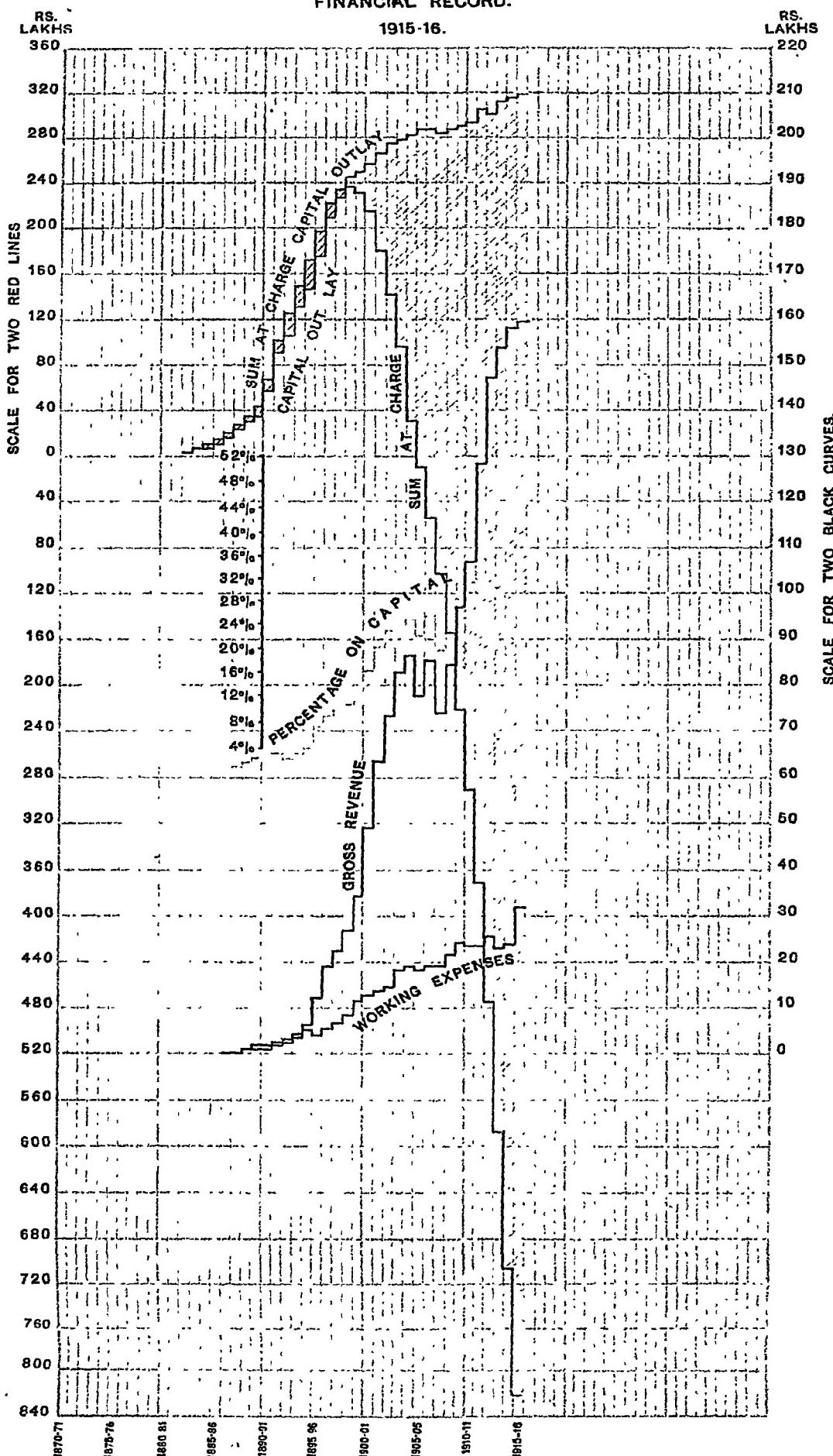
The duties are derived from these areas and discharges.

The Rabi winter supply is comparatively high and reliable on this canal.

LOWER CHENAB CANAL.

FINANCIAL RECORD.

1915-16.



N. B.—The intercepts in red area show arrears of interest (which are small on this canal) and which being added to the capital give sum at charge.

The intercepts in the blue area are accumulated profits all arrears of interest were paid up in 1898-99.

The intercepts between the two black lines give net revenue.

Remarks—This canal differs greatly from the older . 1s. 1d.

6. The net revenue amounted to Rs. 1,26,50,247 equivalent to a return of 39·78 per cent. on the capital outlay of Rs. 3,17,96,780 incurred up to date.

Financial results based on collections.

In the previous year the figures of net revenue and percentage on capital were Rs. 1,32,53,785 and 41·81 per cent., respectively.

The decrease in net revenue in 1915-16 is due partly to shortage in kharif area partly to special rabi remissions and partly to increased expenditure on special works.

The accumulated net profits have increased from Rs. 10,24,86,450 to Rs. 11,40,60,690 against a capital of Rs. 3,17,96,780 invested at the close of the year.

Point's of interest.

7. The following are some points of interest worth recording :—

The canal was in flow altogether for 161 days in the *kharif* and 183 days in the *rabi*, i.e., for a total of 344 in the year, and the average daily discharge at canal head was just over 8,000 cusecs.

In this period of time it irrigated 2,281,079 acres or nearly 3,500 square miles of crops and earned a net revenue of close on 127 lakhs of rupees.

These figures, while affording some idea of the productive capacity of water, do not throw any light on the immense activities and efforts repeated year in and year out by the great mass of cultivators who use the water and pay the revenue.

The following will help to form some appreciation of what this must amount to. The irrigation done is not uniform throughout the year, it is, in fact on this canal as on some others, very disproportionate as between kharif area and rabi area. The rabi area for 1915-16 forms 75 per cent. of the total irrigation, which means that in 183 days the area irrigated and matured was close on 75 per cent. of 3,500 square miles, i.e., 2,625 square miles of crops were irrigated and matured in this short time. But this is not all ; it is not only the area done but the quantity of water with which it is done. This will best be understood when it is stated that whereas in the kharif the cusec of constant discharge was carried no further than to irrigate 89 acres, the same discharge was in the rabi spread over 267 acres, i.e., three times as far.

The effort involved is tremendous and constant during this period and the measure of success largely dependant on the smooth working and efficiency of the canal.

It has been stated that the net revenue earned in the year was nearly 127 lakhs of rupees ; this being the money value of Governmental effort it may be asked what is the equivalent gain to cultivators as a whole. The following figures will show this approximately.

The average profit of an acre of irrigated land may be taken as valued at Rs. 30 out of which after paying Rs. 10 land revenue *plus* canal rates the balance Rs. 20 is the cultivator's share. Thus for the year under² report the cultivators have recovered Rs. $20 \times 2,284,079$, or approximately three million pounds-sterling.

The following are the areas of the more important crops :—

Acres.

Wheat	...	...	1,039,114
Toria	...	...	186,925
Cotton	...	...	153,471

UPPER JHELUM CANAL.

This year, the 12th since construction began, saw the opening, on the 7th October 1915, of this the final link of the Triple Canal Project. The opening ceremony was performed by His Excellency, Lord Hardinge of Penhurst, the then Viceroy and Governor-General of India, on the 9th December 1915.

1. Description. During the year, the Head Regulator of the canal (the only work required on the river) was successfully completed ; the deep cutting immediately below the Regulator, through which the canal runs, was sufficiently advanced to admit of the canal being opened for irrigation in October. The excavation of this cutting was full of difficulties, and a large slip which occurred between R. D. 75 and R. D. 750 of the canal on the 22nd August 1915, made matters worse ; this slip was successfully tackled, and the material, which blocked the canal temporarily, was removed, and the banks set back sufficiently to prevent a recurrence of the evil. The total quantity of material which had thus to be removed, due to this slip, amounted to only 60 lakhs cubic feet all told. This slip was inspected by the Director of the Geological Survey of India and examined in detail by an officer of that department, deputed by him for the purpose. They expressed the opinion that further slips were not likely in the same region, and that the rest of the cutting was also not likely to suffer from similar causes. The year under report, thus, saw the Main Line and the Gujrat Branch completed from Head to Tail and a brisk beginning made on the construction of Main Line and Gujrat Branch distributaries and their water-courses. None of these latter were, however, sufficiently advanced by October to be opened for irrigation.

The area proposed to be annually irrigated as now arrived at is 327,928 acres against 344,960 acres anticipated in the project. The designed discharge at head of the canal is 8,500 cusecs and at tail 7,812 cusecs.

2. The expenditure (direct and indirect) amounted to Rs. 19,43,740, which brought up the total cost debited against Capital outlay. the project at end of the year to Rs. 4,23,61,119. The expenditure was incurred chiefly on : Mangla cut and the Head Regulator ; iron work and gearing for Regulator Suketar II ; road bridges over weir Suketar I and Bong escape ; district road bridges, falls, inspection houses, head regulators of distributaries, and masonry works on the Gujrat Branch ; fall and bridge at R. D. 418,500, Main Line ; excavating Bhimber Diversion, Main Line ; constructing 2 upstream groynes and a crest wall to syphon R. D. 285,600, Main Line ; constructing Sub-Divisional Offices with menial quarters at R. D. 347,010, Main Line, and at Chakori ; inspection houses at Pahrianwala, Kalu Pindi, Mitha Chak and Maghowala ; and masonry works on distributaries and minors of Main Line.

3. A revenue account was opened during the year. The receipts Revenue account. amounted to Rs. 6,294, and the expenditure to Rs. 3,42,150, showing a deficit of Rs. 3,85,916, as against project anticipated revenue of Rs. 2,22,500. The reason for this deficit is that no irrigation was done during the year, and the above receipts were from rent of buildings and some other miscellaneous sources.

4. Expenditure amounted to Rs. 20,225, and was incurred mainly Extensions and improvements. on improvements connected with the slip mentioned in paragraph 1 *supra*, the approach roads in the Mangla Station and protection below the tail fall at R. D. 418,500 Main Line.

5. Expenditure of Rs. 2,50,338 was incurred on the maintenance and Maintenance and repairs. watching of canal banks ; strengthening weak reaches and maintenance of buildings ; canal drains and plantations...

6. The rainfall figures for the year under report compare as below with those of 1914-15 :—

Stations.					1914-15	1915-16.
Mangla	...	...	...	..	(a) 24.88	16.33
Panranwala	...	...	...	...	29.60	12.10
Dinga	...	..	...	..	32.35	15.18
Karariwala	...	...	...	...	20.10	8.30
Mand	...	...	...	...	23.40	8.40

(a) Average for the previous 7 years

The year was unusually dry and there were no floods of importance either in the river or in the cross drainage works. The latter were all thoroughly inspected and maintained in good order and repair ready for the heavy floods that usually follow such a year of drought.

LOWER JHELUM CANAL.

1. The expenditure (direct and indirect) amounted to Rs. 24,724, but Capital account the recovery of Rs. 2,526 from the cultivators on account of aercage rate, and a credit of Rs. 7,898 under the suspense account (stock issues to works), reduced it to Rs. 14,300. This brought the total outlay to end of the year to Rs. 1,59,65,762. The expenditure was incurred chiefly on Superintending Engineer's residence and office at Sargodha, and masonry outlets on the Faruka distributary.

2. Expenditure amounting to Rs. 22,220 was incurred on materials Extensions and improvements supplied by the Central Workshops, Amritsar, for remodelling the Rasul Head Regulator; remodelling discharge flumes at Ala, and at R. D. 4,500 Northern Branch, and remodelling Heads of Mithalak, Ajnala and Janiwala distributaries.

3. Expenditure to the extent of Rs. 2,46,658 was incurred on the Maintenance and repairs annual maintenance of channels, masonry works, buildings and on the stone "talus" below Rasul weir, repairing nose of Divide Groyne, filling scour below undersluices; repairs to noses of groynes 6 and 7 of the weir, and to stop-dam at R.D. 141,000 of the Main Line.

Nature of seasons and state of demand and supply.

4. The rainfall was scanty, and is compared below with that of the previous three years :—

District.	Season.	YEAR			
		1912-13.	1913-14.	1914-15.	1915-16.
Shahpur ...	Kharif .	Inches. 10.10	Inches. 12.84	Inches. 17.02	Inches. 3.96
	Rabi ...	2.30	3.23	4.22	0.36
	Total .	12.70	16.07	21.24	4.32
Jhang ...	Kharif ...	7.81	13.06	13.40	1.98
	Rabi ..	2.67	3.00	2.93	0.36
	Total ...	10.48	16.75	16.33	2.34

The kharif season opened unfavourably and continued so throughout. A fairly large area was sown, but with moderate success owing to the scarcity of rain, exceptionally hot dry weather, insect pests, and disease. At the beginning of the season a great deal of damage was done to crops by grass-hoppers. Cotton sowings were greatly restricted owing to the low prices that were realized in the previous year on account of the war. The outturn was also very poor, the plants grew well and looked healthy and strong, but flowered very late, and the bolls that formed were attacked by boll-worm. General remissions on account of failure of cotton had, therefore, to be granted under rule 20 (iii) of the rules under the Canal Act.

The rabi season was practically dry, there being only 0.36 inches of rainfall which occurred in the months of December 1915 and February 1916. Hail stones fell in some parts of the 2nd Division and damaged the crops.

The total area remitted was 22,280 acres including 2,228 acres remitted under Tenancy Rules. The failure of cotton and grain accounted for 13,388 acres, and the balance was due to other causes.

The canal was closed at its head for 5 days during *kharif*, and for 13 days during *rabi*, for special repairs to works.

The demand for water was keen and the supply sufficient. During February and the first week of March 1916, rotational working of the branches was required for the first time in the history of the canal.

5. The areas, irrigated and assessed, compare as follows with the corresponding figures of the average of the preceding triennium :—

District.	AVERAGE OF THE THREE YEARS ENDING 1914-15.			1915-16.		
	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.
<i>Irrigated areas.</i>						
Gujrat	4,387	8,166	12,553	4,156	9,430	13,586
Shahpur	197,023	478,564	675,587	175,069	517,320	692,908
Jhang	41,236	87,082	128,320	37,032	90,560	127,592
Total	242,646	573,812	816,460	216,857	617,810	834,176
<i>Assessed areas.</i>						
Gujrat	4,349	8,146	12,495	3,986	9,480	13,418
Shahpur	192,896	471,185	664,081	159,882	514,017	673,899
Jhang	36,200	82,780	118,980	34,153	90,426	124,579
Total	233,445	562,111	795,556	198,023	613,873	811,896

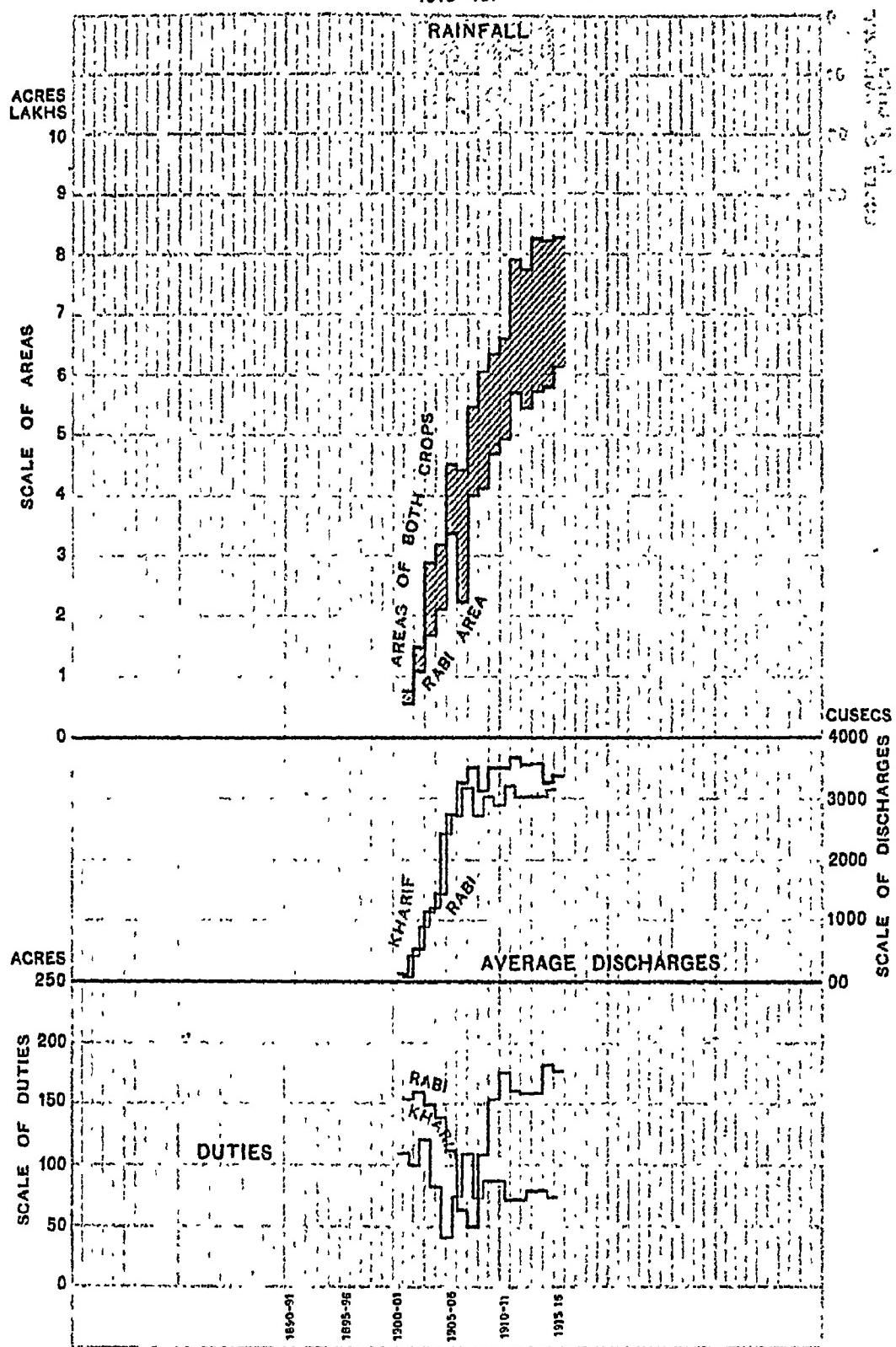
The decrease in the area irrigated during kharif was due to the causes detailed in paragraph 4 above, and the reason for an increase under rabi was the failure of the winter rains whereby the area that was sown *barani* had to be matured by the canal.

Out of the total area of 834,176 acres irrigated 377,253 acres were in proprietary villages and 456,923 acres in colony villages.

LOWER JHELM CANAL.

WORKING RECORD.

1915-16.

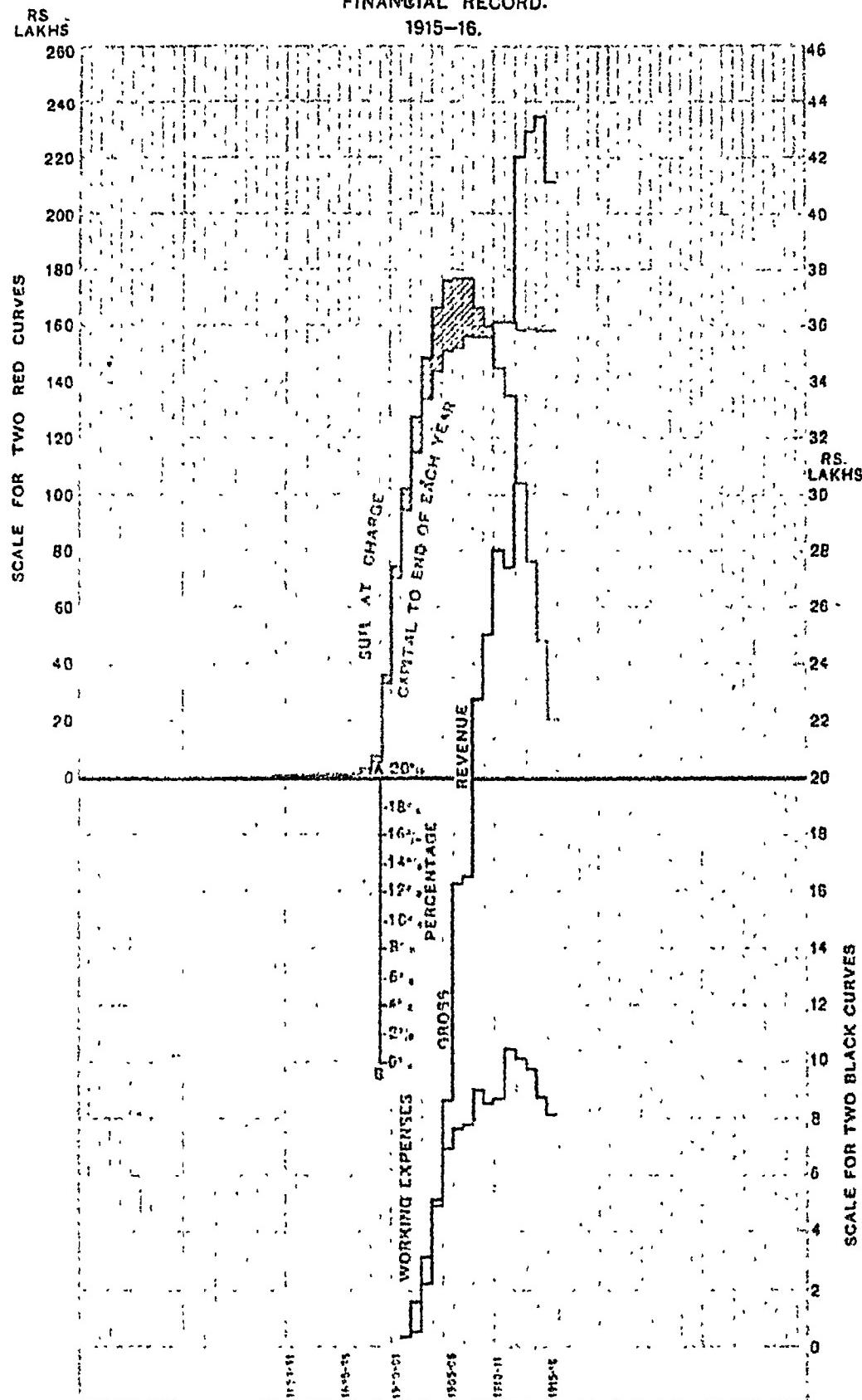


N. B.—The intercepts in red area give the Kharif irrigation each year. The discharges are measured at mile 14 of the main canal and give averages for each crop. The duties are derived from these areas and discharges.

LOWER JHELUM CANAL.

FINANCIAL RECORD.

1915-16.



N.B.—The intercepts in the red area show arrears of interest which, added to the capital, give the sum at charge.

The intercepts in the blue area give the accumulated profits.

The scheme was commenced in earnest in 1898-99 and opened in 1901. Until 1905-06 the canal did not pay any interest on its capital cost, this being due to free remissions of water rates on new irrigation.

6. The gross actual receipts (direct and indirect) amounted to Rs. 41,21,783, the working expenses to Rs. 8,17,859 Financial results based on collections. and the net revenue to Rs. 33,03,924, giving a return of 20.70 per cent. on the capital outlay to end of the year. This return was about 1 per cent. less than that of the preceding year, due to remissions of about one lakh of rupees on account of failure of cotton in kharif 1915.

The figures for 1915-16 and the average of the preceding three years are compared below :—

Items.	Average triennium. 1912-15.	1915-16.
<i>Direct Receipts.</i>		
Occupiers' rates	26,91,323	25,79,783 (a)
Miscellaneous Receipts	55,512	69,057 (b)
Total Direct Receipts	27,16,835	26,49,440
Indirect Receipts	15,19,090	14,72,343 (c)
Total Direct and Indirect	42,95,924	41,21,783
Charges to revenue	9,59,498	8,17,859 (d)
Nett Revenue	33,36,426	33,03,924
Percentage on Capital	20.00	20.70
Nett revenue less interest	27,99,353	27,63,263
Percentage on capital	17.52	17.37

(a) The decrease was due partly to restrictions of cotton sowings on account of the war; and partly to the general remission aggregating about 1 lac of rupees, as stated above.

The average rate per acre assessed works out to Rs. 3.18 against 3.38 for the previous triennium.

(b) The increase under miscellaneous receipts was due to larger realizations from—

Plantations, water-power, and Miscellaneous.

(c) The decrease under Indirect Revenue follows the decrease under occupiers' rates.

(d) The working expenses were about 1½ lacs less than the last 3 years' average. This was chiefly due to the energy shown by the Superintending Engineer and his staff in economising expenditure on maintenance.

The rate per acre of area assessed was Rs. 0.89 against Re. 1.21 in the preceding triennium.

7. (a). A new Division called the Project Division was formed on 27th June 1916 for the purpose of remodelling the Lower Jhelum Canal. The object of this special division is to secure uniformity of action and progress throughout the canal in the very important work of bringing the outlet system up to modern requirements and to remodel the canals and distributaries to take advantage of any gain of command that has accrued through the gradual silting processes that have been going on during the 15 years since the canal was opened.

Orders could not be passed on such schemes until the project for the Woolar Lake had been got out, the success of the similar division of the Lower Chenab Canal justified entrusting the work to a specially selected officer who would devote all his time to this subject and thus greatly relieve the Superintending Engineer and the other Divisional Officers, whilst at the same time being at leisure himself to thoroughly study the canal as a whole and make suitable proposals for its improvement.

(b) *Remodelling the Head Regulator of the Canal.*—The water way of the head regulator is to be increased by the removal of the jack piers. Caissons have been designed to close off one bay at a time and thus carry out the work without interrupting the canal supply.

(c) *Woolar Lake Barrage.*—A project estimate for this work was prepared in 1915 by Mr. R. E. Purves, C.I.E., late Chief Engineer, Irrigation Branch, Punjab. It is under consideration by the Government of India. The object of the scheme is partly to make good the shortage of supply caused by the Baramula dredging operations and partly to supplement the winter supplies of the Jhelum river for the use of the Triple and other canals.

(d) Another scheme for supplementing the supply of the river is the Kahan Dam. Rainfall and run off statistics are being collected. This year the run off of the catchment area was approximately 32,500 foot acres.

(e) Efforts are being made by the Divisional Officers to enforce, with greater rigidity, the rules for the preparation of fields for irrigation to effect the economical use of water these rules have not been properly observed by the cultivators in the past. Attention is also being paid to village water-course systems over the "Dhayas" or old river banks as these are not at present efficient.

UPPER SUTLEJ DIVISION INUNDATION, CANALS.

1. Expenditure (direct and indirect) amounted to Rs. 11,602, and was incurred mainly on completing the rest-house at Capital account Ladhewal and the subordinates' rest-house at Kalewal and on constructing subordinates' rest-houses at Lalugudar and Bunga Hyat.

2. Expenditure amounted to Rs. 19,746 and was mainly incurred on constructing 3 new bridges on the Kangapur, Attari and Chunian distributaries; providing railings to the Gandasinghwala regulator and escape head; constructing out-houses, stables and cook-house at Kaliana, cook-houses at Jiwan Shah and Shahamad, and kutchha subordinates' quarters at Taher; re-roofing Kaliana rest-house and making 15 pucca outlets on Khanwali.

3. Expenditure incurred was Rs. 2,10,397 and was in addition to the ordinary silt clearances of the Canal head reaches. Maintenance and repair. and the ordinary maintenance of all Government channels, incurred on the following special works :—

Excavating a new head reach, Upper Sohag Canal; extending head reaches of the Lower Sohag and Katora Canals; and regrading and improving the Faridpur, Pakpattan, Gobindpur and Dhapai distributaries.

4. The gross income amounted to Rs. 7,46,103 and working expenses Financial results based on collections. to Rs. 4,09,703, showing a net revenue of Rs. 3,36,395 or 18.50 per cent. on the capital invested as against 14.59 per cent. in 1914-15. This highly favourable result is due to the record area irrigated in rabi 1914-15.

5. The following tables compares the area irrigated with the averages of the two previous trienna :—
Area irrigated.

Crop.	AVERAGE OF 3 YEARS ENDING.						REMARKS.	
	1911-12.		1914-15.		1915-16.			
	Gross.	Net.	Gross.	Net.	Gross.	Net		
Kharif	... 1,30,376	1,10,252	1,75,178	1,58,715	1,31,167	1,27,612		
Rabi	... 1,55,748	1,55,715	1,77,888	1,77,889	1,38,559	1,39,559		
Total	... 2,85,121	2,65,997	3,53,066	3,36,603	2,72,746	2,66,171		

It will be seen that the net area assessed exceeded by 174 acres the average of the triennium ending 1911-12, whereas it is short by 70,432 acres as compared with the average of the 3 years ending 1914-15. Excluding, however, the record year of 1914-15, the net area assessed is less by 22,000 acres than the average of the 10 previous years. Considering the year under review as one of extreme drought the result should be considered satisfactory.

6. (a) The following table shows the dates of opening and closing of the canals together with the corresponding dates of previous year.
General remarks

Canals	DATE OF OPENING		DATE OF CLOSING		NUMBER OF DAYS CANAL WAS IN FLOW.		REMARKS.
	1915	1914	1915	1914	1915	1914	
Katora	Forenoon 10-5-15	Afternoon 6-5-15	Afternoon 16-10-15	Forenoon 7-10-14	160	153	
Khanwah	Forenoon 1-5-15	Afternoon 19-5-14	Afternoon 26-10-15	Forenoon 13-10-14	16	116	
Upper Sohag	Forenoon 9-5-15	Afternoon 1-5-14	Afternoon 14-10-15	Afternoon 15-10-14	159	167	
Lower Sohag	Forenoon 10-5-15	Afternoon 8-5-14	Afternoon 11-10-15	Forenoon 5-10-14	153	154	

(b) Some works of improvement calculated to increase substantially the annual irrigated area were carried out during the year. As a result of these the Katora Canal now possesses two good reserve heads, one of which was actually used towards the end of the last slow season with good effect. Similarly the Upper and the Lower Sohag Canals have been provided with effective reserve heads. The four distributaries which used to give considerable trouble on account of short supply at their tails were regraded and improved with a view to remedy these defects.

SIDHNAY CANALS (INCLUDING THE KORANGA, FAZIL SHAH AND ABDUL HAKIM SUBSIDIARY CANALS.)

1. No expenditure was incurred during the year. A credit of Rs. 966, under the Suspense Account (stock issues to works) Capital account, was, however, received during the year and this reduced the outlay to end of the year to Rs. 13,30,901.

Settlers account.—The balance of Rs. 2-7-7 at end of the previous year was spent during the year. A further sum of Rs. 31-12-0 on account of repairs to bridges on the Sidhnay Canal was, however, received which will be cleared in 1916-17.

Extensions and improvements,

2. Expenditure was Rs. 10,516 against Rs. 3,856 in the previous year, and was incurred on works of a minor character.

3. Expenditure amounted to Rs. 43,062 against Rs. 69,562 in the previous year, and was incurred on the usual annual repairs, silt clearances and strengthening distributaries.

4. The total rainfall at Kabirwala was only 2.72 inches. (2.41 inches in *kharif* and 0.31 in *rabi*) against 14.59 and 1.37, respectively, during 1914-15. There was a marked absence of high floods in the Ravi.

The demand for water was keen throughout the year.

The supply in the Sidhnai and subsidiary canals was abundant during *kharif* with the exception of the months of June and July during which there was some shortage of water. Indigo and early sowings of jowar suffered to a small extent on this account. During *rabi*, the river failed very early. The subsidiary canals had to be closed on 23rd October 1915, and the Sidhnai ceased to flow on 3rd November 1915 when the Ravi ran dry.

5. The following table compares the irrigation effected on the whole system with the averages of the two previous triennia :—

Season.	AVERAGE OF 3 YEARS ENDING.		1914-15.	1915-16.
	1911-12.	1914-15.		
		Rs.	Rs.	Rs.
Kharif ...	1,10,572	1,27,037	1,39,677	1,17,999
Rabi ...	1,47,295	1,51,507	1,91,982	1,52,151
Total ...	2,57,867	2,78,544	3,31,659	2,70,150

Although the area irrigated during the year compares unfavourably with that of the preceding year, it is, nevertheless, well above the average. The percentages of failed area were 16.46 in *kharif* and 18.06 in *rabi*, large figures, due mainly to scanty rainfall.

6. The total income from all sources amounted to Rs. 8,32,779 against 6,72,544 of the preceding year. The *rabi* area of 1914-15, being far above the average, conduced to these remarkably large receipts.

Working expenses amounted to Rs. 1,46,592 and net income to Rs. 6,86,187 or 51.55 per cent. on the capital outlay against 5,14,314 or 38.61 per cent. of the preceding year.

The uncollected balance of assessment of occupiers' rates was 3,173.

8. The financial results of the year are eminently satisfactory. Figures of irrigation show some reduction on those of the preceding year, which was, however, an exceptional one. The *rabi* area matured in 1916 was remarkably good in view of the small amount of precipitation.

No works of any magnitude are contemplated owing to stringency resulting from the war.

INDUS INUNDATION CANALS.

1. The expenditure (direct and indirect), amounting to Rs. 1,51,024 compared with Rs. 3,326 in 1914-15, and was incurred (a) on the construction of a residential building for the Executive Engineer at Dera Ghazi Khan, (b) the scheme for giving a perennial supply of water for irrigation to the Dera Ghazi Khan Municipality, (c) and the lowering of the bed of the head reach of the Manka Canal.

2. Rupees 117,195 were spent as compared with Rs. 87,713 during the preceding year. Numerous works of a minor nature were completed and the following important works were in progress :—Constructing a retired ring bund behind the Kotla bund ; a new head for the Fazalwah canal ; the Chhabri and Dhan Sikhani flood embankments ; a diversion of the Banuhan Branch, and a new head reach for the Kasturi canal. The Tafai flood embankment was raised, and a tie bund between the Manka Canal and Shah Sadar Din was constructed.

3. Expenditure amounted to Rs. 1,95,703 against Rs. 1,86,221 in the previous year, and was incurred on the usual annual maintenance and repairs, silt clearances of canals, strengthening of certain flood embankments and other miscellaneous works.

4. The average rainfall during kharif was 1.07 inches and during rabi Nature of seasons, and rate of demand 0.85 inches against .93 inches and 2.20 inches, and supply. respectively, during 1914-15. The Indus river gauge at Attock did not, at any time, rise above 32 feet, whereas, in ordinary years, floods of between 40 and 50 feet are to be expected.

The demand was keen owing to scanty rainfall.

Locusts were prevalent during the early part of the kharif, and some damage to crops also resulted from violent winds in September.

The following statement shows the periods during which canals were in flow :—

Name of canal.	DATES OF		Number of days canal was in flow.
	Opening.	Closing.	
Massuwah	1st June 1915 ...	6th October 1915 ... 113
Fazalwah	2nd May 1915 ...	16th October 1915 ... 167
Manka	1st May 1915 ...	11th October 1915 ... 163
Shoria	20th April 1915 ...	9th October 1915 ... 163
Kasturi	1st May 1915 ...	10th September 1915 ... 121
Dhingana	10th April 1915 ...	11th October 1915 ... 177
Chibri	1st May 1915 ...	14th October 1915 ... 152
Sahiban	30th April 1915 ...	8th October 1915 ... 149
Gamun	4th May 1915 ...	7th October 1915 ... 139
Nur Dhundi	4th May 1915 ...	20th October 1915 ... 169
Dhundi Kutab	10th May 1915 ...	20th October 1915 ... 163
Kadra	6th May 1915 ...	12th October 1915 ... 163

With the exception of the Manka, Massuwah, Kasturi and Nur Dhundi Canals supplies were, on the whole, favourable, and the Dhingana Canal showed a marked improvement over previous years. The low supply in the Nur Dhundi Canal, due to unfavourable conditions at the off-take, is regrettable, as the Dhundi Estate mainly depends on irrigation from this source.

5. The following table compares the areas assessed with the averages of the two previous triennia :—

NAME OF CROP.	AVERAGE OF THREE YEARS ENDING			1915-16.	
	1911-12.		1914-15.		
	Acres.	Acres.			
Kharif	134,663	119,950	102,147		
Rabi	82,199	57,021	70,882		
Total	216,862	176,971	182,029		

The decrease in *kharif* is attributed to the paucity of supply in some of the canals owing to a low river and absence of heavy floods.

This decrease was, however, to some extent, compensated for by the rabi, which is the second largest on record.

6. The total income from all sources was Rs. 4,37,175 against Rs. 4,25,502 in 1914-15, and the total expenditure amounted to Rs. 4,41,584 against Rs. 4,14,151 of the preceding year. There was, therefore, a deficit of Rs. 4,409 against the profit of Rs. 11,351 in the preceding year.

The uncollected balance of the assessment of occupier's rate was Rs. 14,554.

The percentage on the Capital outlay was Re. 0.14 against Re. 0.4 in the previous year.

7. Financial results are again disappointing, but due regard should be had to the fact that the heads of the canals of this series are subject to changes on a large scale and require heavy expenditure to maintain. Furthermore, prevention of river spill requires the maintenance of many miles of expensive flood embankments, and, although the river at the site of the old city of Dera Ghazi Khan has moved to the east, inroads on the west bank at certain points still continue, notably opposite Dhan Sikhani, Chabbri, Sahiban and Kotla. At these sites costly retired works have to be thrown up, and a large slice of the revenue earned by the canals, which, under favourable conditions, might be devoted to works of a remunerative, as distinct from a protective, character, is swallowed up in the process.

During the course of the year the heads of the Fazalwah and Kasturi Canals were reconstructed and remodelled, the latter work disposing of a long outstanding necessity. The new town of Dera Ghazi Khan has been provided with a small perennial water-supply for irrigation by means of pumping. The bed of the Manka Canal in the upper reach of over 20 miles was lowered by about 1 foot, by which means the capacity of the canal is increased and the areas at the tail will benefit accordingly. This work, which cost over one lakh of rupees, provided labour for those hit by the scarcity prevailing in the district at the end of the hot weather of 1915, owing to failure of the monsoon rainfall.

The principal works of importance under contemplation are :—

- (a) A syphon to carry the Fazalwah across the Manka Canal for irrigating high land uncommanded by the latter.
- (b) Amalgamating the Sohan Branch with the Gamun Canal to improve irrigation on the Lower Dhundi and Sohan.
- (c) Constructing the Akilpur Minor for irrigation of land at present insufficiently supplied with water.

Minor Irrigation Works.

SHAHPUR (IMPERIAL) INUNDATION CANALS.

Capital account.

1. No expenditure was incurred during the year.

Extensions and improvements.

2. The expenditure amounting to Rs. 258 was incurred on minor works only.

Maintenance and repairs.

3. Expenditure to the extent of Rs. 25,157 was incurred on silt clearance and usual maintenance and repairs.

4. The rainfall during the year was 3.53 inches against 24.43 inches

Nature and season and state of demand and supply.

in the previous year. During *kharif* the rainfall was 3.15 inches and during *rabi* 0.38 inches. The *kharif* rainfall occurred in April 0.72", May 0.51", June 1.03", July 0.52", August 0.29" and September 0.06". During *rabi* the months of October, November and December were quite rainless, and the showers in January, February and March 1916 only aggregated to 0.38 inches.

Owing to low supply in the river, the water failed to enter the canals on 2nd September, but on account of an abnormal flood in the river in October the canals again flowed for four days and after that ceased to flow finally for the rest of the year.

Area irrigated.

5. The irrigation of the year compares as follows with the averages of the two previous triennia :—

SEASON.	AVERAGE FOR THREE YEARS ENDING		Actual for 1915-16.
	1911-12.	1914-15.	
	Acres.	Acres.	Acres.
Kharif	... ...	11,287	18,786
Rabi	... ...	20,797	24,095
Total	...	32,084	43,481
			26,759

The area successfully matured and assessed was 23,017 acres as against 40,953 acres, the average of the previous triennium the decrease being due to unfavourable rainfall and to the inadequate river supply, as well as to the heads of the Eastern and Western Station Canals not having worked satisfactorily on account of a change in the position of river during flood and consequent silting-up of the feeding creek.

Revenue was remitted on 3,712 acres; of this 862 acres were due to short supply in July, August and September 1915, 202 acres were damaged by hail stones, 1,076 acres remitted on account of general remissions on the cotton crop, and 1,572 acres for bad seeds, poor soil, bad germination, insects and blight.

6. The gross revenue realized amounted to Rs. 92,201 and working expenses to Rs. 52,887, leaving a nett revenue of Rs. 39,314, which is equivalent to a return of Rs. 18.20 per cent. on the Capital outlay to date.

Details compare as follows with the averages for the preceding triennium :—

Details.	Average 3 years ending 1914-15.	Actual, 1915-16.
	Rs.	Rs.
Receipts direct	90,282.	77,094
,, indirect	17,704	15,107
Total	1,07,986	92,201
Working expenses	59,024	52,887
Net revenue	48,962	39,314
Percentage of net revenue on capital	22.68	18.20

The decrease under revenue is due to less irrigation and larger remissions owing to the unfavourable season.

GHAGGAR CANALS.

1. The expenditure amounting to Rs. 19 was incurred on B—Land Capital Account. This brought the total cost to date to Rs. 6,61,571 (Rs. 3,76,129 under "Imperial" and Rs. 2,85,442 under "Contribution").

Extensions and improvements. 2. Expenditure was Rs. 2,908 under "Imperial" and Rs. 1,193 under "Contribution," and was incurred on petty works of improvement.

3. Expenditure was Rs. 11,643 under "Imperial" and Rs. 2,548 under "Contribution" as compared with Rs. 7,075 and Rs. 1,722, respectively, for the preceding year. The excess was chiefly due to heavy repairs to the lake protective pitching and to the Head Regulators and Escape Head.

4. (a) *Kharif*.—Rain started in June and was general between 6th and 21st June in both the British and Bikaner areas. The fall of 1.6 inches recorded on 14th June 1916 at Mojukhera was the heaviest in British territory. July was practically dry. There were light showers in British and Bikaner areas during August and September. The rainfall on the whole was considerably in defect on the Ghaggar area. Water reached Otu weir on 18th June but the lake supply remained very low and the channels could not be properly opened till the middle of August and then only with very low discharge for a few days only. The lake did not fill till 20th September, hence the kharif irrigation was practically a failure. The supply in the lake was good at the end of September and the first half of October, and a good rabi crop was, therefore, put down.

(b) *Rabi*.—The lake was unwatered by 1st November to permit of sowings in the lake basin. There was no rain during the rabi season, except light showers. The largest amount of rainfall recorded was 0.5 inches at Kamrani in Bikaner area on 1st February.

(c) Rainfall.—The average rainfall of all stations for the year was—

British 3·15 inches.

Bikaner 2·2 "

against British 16·50 inches, Bikaner 19·65 inches during 1914-15. Water was escaped down the river from 22nd to 27th September and on 3rd and 4th October only. The Northern and Southern Canals ran for 27 and 30 days during kharif and 23 and 26 days during rabi with average discharges of 133 and 207 cusecs, respectively.

5. The following table shows the area irrigated in British and Bikaner Territories during the past 5 years ending 1915-16. The area in British territory includes area assessed by the Civil Department.

	Total number of days canal was in flow.	Total.	Rabi.	Kharif.	Crop	1911-12		1912-13.		1913-14.		1914-15.		1915-16.					
						Acres.	British.												
						2 <i>Hl.</i>	Bikaner.												
Northern Ghaggar Canal.	117	46				6,593	2,691	3,902	3,902	17,527	21,925	12,725	3,035	9,090	19,560	4,765	14,505		
Southern Ghaggar Canal.	117	32				41,352	2,691	21,925	21,925	7,79	4,914	2,465	22,141	20,940	6,385	1,720	5,115		
						48,531				73									
										80									
						21,390	15,060	9,130	9,130	8,066	6,103	1,063	102	32,159	21,463	10,993	22,006	17,788	4,318
													100				3,168	3,156	12
																	25,174	20,944	4,239

The figures for 1913-14 to 1915-16 did not include the area under "palaver" whereas the areas for the previous years included it. The "palaver" area excluded in 1915-16 was 7,198 acres which were watered but not sown and on which no water rates were charged. Including "palaver" area, therefore, the

total area was 32,372 acres. The land under fluctuating assessment is not subject to water rates but the canals receive a credit for any fluctuating revenue in excess of Rs. 37,000 per annum. As, however, this sum is very seldom even nearly approached the canals receive no revenue whatsoever for the greater part of the irrigation which they do.

The amount of occupier's rate assessed was Rs. 958 in kharif and Rs. 17,550 in rabi and the rate per acre assessed works out to Rs. 3.1 and Rs. 2.4, respectively.

6. The operation of the year resulted in a loss of Rs. 18,473 which is equivalent to 4.91 per cent. on the Capital outlay compared with a loss of Rs. 23,134 equivalent to 6.15 per cent in the previous year. So long as the canals receive no revenue for the greater part of the irrigation which they carry out, they cannot be expected to be remunerative.

The greater part of the revenue for the irrigation is credited to Civil Department and not to the Irrigation Department

7. (a) The result of the year's working would have been satisfactory if all irrigated land paid water rate. The canals were in flow for 53 days only during the year against 120 days in 1914-15 and 100 days in 1913-14.

General remarks. The area remitted in British Territory was 40 acres in kharif and 149 acres in rabi. The approximate value of crops matured on the Ghaggar Canal in British Territory amount to Rs. 5,67,751 against Rs. 10,72,727 in the previous year. The principal crops grown are wheat and rice.

(b) *Nature and scope of contemplated new work and progress made on the preparation of new projects.* —The work of raising of the reservoir level by 3 feet which was held in abeyance in 1914-15 was again taken up during the year, but the final decision will probably depend on what areas will be taken up by the Bhakra storage dam scheme now under investigation.

(c) *Working Canals in the Bikaner State.*—Water was given to the Bikaner State in accordance with the indents received, but as usual these indents were far below the share of the water due to the State. It is believed that the State Channels are in such inefficient order that they are incapable of holding large supplies without breaching. It is also stated that a great deal of the water supplied was really turned out into the Talwara Jhil and was not used for irrigation at all; but as the whole supervision of channels and revenue within State territories is done by State officials, no definite information on the failure to get better rabi irrigation results can be given:—

The following details of irrigation have been supplied by the State—

Canals.	1915-1916.			1914-15.		
	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Total.
Northern Canal	12	1,999	2,011	1,223	4,984	6,207
Southern Canal		1,157	1,157	440	4,419	4,859
Total	12	3,156	3,168	1,663	6,403	8,066
Flow	12	3,156	3,168	1,663	6,403	8,066
Lift ... ...	...	...	...	...	...	...
Total as above ...	12	3,156	3,168	1,663	6,403	8,066

The following table shows the working of the Canals as reported by the State :—

Particulars.						1914-15.	1915-16.
<i>Receipts.</i>							
Water rate	...	...	...	...	...	20,958	8,408
Miscellaneous	...	...	...	...	...	175	154
				Total	...	21,133	8,562
<i>Working Expenses.</i>							
Establishment	...	...	...	...	...	1,784	2,913
Other Expenses	...	...	...	...	...	6,313	8,908
				Total	...	8,097	11,821
Profit or Loss (Net)	...	...	...	...	...	+13,036	-3,259
				Total as above	...	21,133	8,562

Adding Rs. 4,764 debited to the Bikaner State on account of share of expenditure on the Ghaggar Canals it appears that the State suffered a loss to the extent of Rs. 8,023 on the year's operation against a profit of Rs. 9,333 in 1914-15 and Rs. 464 in 1913-14.

LOWER SUTLEJ INUNDATION CANALS.

1. The canals are classified under "43 Minor Works and Navigation" for which no Capital account is kept.

Extensions and Improvements. 2. Expenditure amounted to Rs. 54,227 mainly incurred on the following works :—

Diversion [of the Muhammadwah Canal above Abanwah syphon.
Second diversion of the Muhammadwah Canal.

Diversion of the Mailsi Canal near Salol, and converting the Sahuka Bridge over the Hajewah Canal into a regulator.

With the exception of the last mentioned these works were necessitated by river incroachments.

Maintenance and repairs. 3. Expenditure amounted to Rs. 1,11,535 against Rs. 1,24,449 during the preceding year.

4. The year was remarkable for scanty rainfall; that recorded at Lodhran was 0·51", (0·38" in kharif and 0·13" in rabi, against 7·43" and 2·05" respectively, in the preceding year.) In the Mailsi Sub-Division only one light shower occurred in June, and, apart from this, no appreciable rain fell throughout the year.

As may readily be understood the demand for canal water was very keen. On the whole, the supply of water in the Sutlej was satisfactory and there was a marked absence of heavy floods.

The following statement shows the dates of opening and closing of the canals:—

Name of canal.	DATES OF		No. of days canal was in flow.
	Opening.	Closing	
Hajiwah ...	11th May 1915	10th October 1915	151
Mailsi ...	13th May 1915	4th December 1915	199
Muhammadwah ...	2nd May 1915	15th Nov. 1915	198
Bahawalwah Lodhran ...	11th July 1915	21st October 1915	179

The Hajiwah Canal failed early on account of the river breaking away from the off-take and leaving it high and dry. The Mailsi Canal suffered from a breach in August, which was closed with some difficulty. The Muhammadwah Canal worked very satisfactorily, not only meeting its own requirements, but, in addition, supplementing the supply in the Bahawalwah Lodhran Canal by means of the cut which connects the two channels.

5. The following table compares the areas irrigated and matured in 1915-16 with the averages of the preceding triennium:—

Season.	Canal.	AVERAGE FOR 3 YEARS ENDING 1914-15.		1915-16.	
		Irrigated.	Matured.	Irrigated.	Matured.
				Acres.	Acres.
Kharif	Hajiwah ...	16,069	13,223	12,465	7,460
	Sutlej Canals ...	125,368	106,388	109,870	84,208
	Total ...	141,377	119,611	129,335	91,668
Rabi	Hajiwah ...	28,019	25,475	14,944	13,767
	Sutlej Canals ...	131,957	126,193	146,293	136,378
	Total ...	159,976	151,668	161,237	150,145
	GRAND TOTAL ...	301,353	271,279	283,572	241,813

The total area which failed to mature was 41,759 acres, viz., 30,667 in kharif and 11,092 in rabi. This is greater than that in the year 1913-14 and 1914-15 but is less than the area remitted during any of the years 1901-02 to 1912-13. Failure was due largely to deficient rainfall.

6. The total income from all sources was Rs. 6,21,610 against financial results based on collections Rs. 6,31,012 in 1914-15, and the total expenditure Rs. 2,83,454 against Rs. 2,74,494 in the preceding year. The net income amounted to Rs. 3,36,156.

The uncollected balance of assessment of occupier's rate amounted to Rs. 177 only.

7. The gross area irrigated, though less than that of the preceding year was greater than any of the years 1909-10 to 1913-14. The results of the year's operations were, on the whole, satisfactory.

General remarks.

The question of safeguarding the Sutlej Valley Railway from River inundation in the neighbourhood of Jamlera and Joya was investigated and some works were carried out on behalf of the Railway Department.

No new works are being undertaken on the Lower Sutlej series beyond those required to maintain the *status quo* as these canals will probably eventually come under the scope of the Sutlej Valley Project.

CHENAB INUNDATION CANALS.

Capital account,

1. No Capital account is kept for these canals. They are classified under "43—Minor Works and Navigation."

Extensions and improvements.

2. Expenditure of Rs. 11,214 against Rs. 12,430 in 1914-15, was incurred mainly on constructing the Qutabpur distributary from the Wali Muhammad Canal, and acquiring land on the Wali Muhammad Canal.

Maintenance and repairs.

3. Expenditure was Rs 1,05,891 against Rs 1,20,426 in the preceding year, incurred on ordinary silt clearances of canals, repairing breaches and strengthening banks of canals.

Nature of seasons and state of demand and supply.

4. The total rainfall at Multan and Shujabad was 0.61 and 0.85 inches, respectively, against 10.10 and 10.95 inches during the preceding year. The Chenab river was very low both at the beginning and end of the season, and high floods were conspicuous by their absence.

The following statement shows the dates of opening and closing of canals:—

Name of canal.	DATES OF	
	Opening.	Closing.
Matithal	5th May 1915	11th September 1915
Daurana Langana	28th April 1915	12th September 1915
Wali Mohammad	29th April 1915	11th September 1915
Sikanderabad	18th April 1915	26th October 1915
Gajuhatta... ...	19th April 1915	20th October 1915
Balochanwah	11th May 1915	3rd September 1915

The canal requiring water earliest is the Sikanderabad, as it has more indigo than any other and also irrigates a large acreage of garden lands. It was opened in April as usual and worked very satisfactorily. The Gajuhatta, which depends on the Sikanderabad for its supply, also worked excellently. The Balochanwah was opened late and failed early owing to silting up of the creek from which it draws its supply. The Matithal was a failure due to silting up of the head. The off-take of this canal is very unsavourably situated, at the confluence of the Chenab and Ravi. It cannot be carried further upstream for this reason. The Wali Mohammad, which irrigates a large number of gardens in the neighbourhood of Multan city, and the Daurana Langana canal had to be

worked in rotation as the supply was insufficient for both. These canals have not been entirely satisfactory of recent years and, as the off-take is situated near the confluence of the Chenab and Ravi, there is little scope for remedial measures.

5. The following table compares the areas irrigated with the averages of two previous triennia :—
Area irrigated.

Season.	AVERAGE OF THREE YEARS ENDING		1914-15.	1915-16.
	1911-12.	1914-15.		
Kharif	...	99,819	100,548	103,977
Rabi	...	90,481	99,582	115,421
Total	...	190,300	200,130	219,398
				170,485

The total area which failed to mature was 28,633 acres, viz., 26·53 per cent. of the total area irrigated during kharif and 7·31 per cent. in rabi against 17·40 and 6·12, respectively, in the preceding year. These large percentages are mainly to be accounted for by the low river and scanty rainfall.

6. The total income from all sources was Rs. 4,71,364 against financial results based on collections. Rs. 4,85,893 in 1914-15, and the total expenditure was Rs. 1,72,292 against Rs. 1,87,476. The net income was, therefore, Rs. 2,99,072.

The uncollected balance of assessment of occupiers' rates was Rs. 3,205.

7. The area irrigated was slightly below the average. Rainfall was practically nil but in spite of this fact crops were remarkably good, the wheat outturn being better than that of the previous year.
General remarks.

No new works of any magnitude are contemplated pending further orders regarding the Haveli Project.

The effect of the abstraction of water from the Jhelum and Chenab rivers for the Triple Canals is receiving attention.

MUZAFFARGARII INUNDATION CANALS.

1. No capital account is kept for these canals. They are classified under 43—Minor Works and Navigation and Agricultural Fund.

2. The expenditure amounted to Rs. 24,170 against Rs. 36,026 in the preceding year and was incurred mainly on completing and extending the piping and remodelling of channels, building new regulators, falls, stop-dams, profile walls, remodelling old bridges and digging new subsidiary feeders and heads for canals.

In addition to the above, Rs. 9,859 were spent from the "Agricultural Fund" on the extension and strengthening of bunds and completing works in progress at the end of the preceding year.

3. The expenditure amounted to Rs. 1,96,207 against Rs. 2,14,570 during 1914-15 and was spent on the ordinary Maintenance and repairs. silt clearances of canals, repairing breaches, strengthening and raising banks and bunds and improving supplies in channels.

In addition to the above Rs. 17,233 were spent from the "Agricultural Fund" on repairs to rest-houses and to the Puran Tie Bund.

4. Rainfall was very deficient throughout the year. The rivers were abnormally low and there were no high floods. Nevertheless a good steady supply was maintained in all the canals except the Ganesh (from the Chenab) and the Suleman (from the Indus). The failure of the Ganesh was due to the silting of the feeder and there was difficulty in maturing the kharif. In the Suleman, the supply was short at the beginning of the season owing to heavy erosion and consequent shoaling of the feeder. The Kot Sultan had an excellent supply throughout and in consequence it irrigated an area greater than usual and matured all but 2·4 per cent., against 10·7 of the year 1914-15.

The following statement gives the period during which the canals remained in flow :—

	Name of Canal.	Dates of opening.	Dates of closing	Number of days canal was in flow.
Indus Series	Kot Sultan ...	29th April 1915	... 23rd December 1915 ...	239
	Magasson ...	5th May 1915	... 15th October 1915	164
	Maggi ...	5th May 1915	... 15th October 1915 ...	164
	Ghuttu ...	2nd May 1915	... 15th October 1915 ...	167
	Puran ...	28th April 1915	... 9th November 1915 ...	196
Chenab Series	Suleman ...	2nd May 1915	... 10th October 1915 ...	162
	Karam ...	4th May 1915	... 6th September 1915 ...	125
	Ganesh ...	5th May 1915	... 15th September 1915	132
	Taliri ...	9th May 1915	... 21st September 1915	134

5. The following statement compare the areas irrigated during 1915-16, with the averages of the two previous triennia :—

Season.	AVERAGE FOR THREE YEARS ENDING 1911-12			AVERAGE FOR THREE YEARS ENDING 1914-15.			1915-16.		
	Matured area.	Failed area.	Percentage of Kharifa.	Matured area.	Failed area.	Percentage of Kharifa.	Matured area.	Failed area.	Percentage of Kharifa.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Kharif	136,614	24,983	15·4	133,668	24,205	15·8	126,751	11,228	8·1
Rabi	199,185	18,984	6·6	209,370	18,667	6·2	225,233	14,183	5·9
Total	335,699	38,867	10·4	342,044	37,972	10·0	351,984	25,411	6·7

Although the area during the year fell short of that irrigated in 1914-15, the area matured was greater. A satisfactory feature of the season's operations

is the low percentage of failed area, viz., 6·7 per cent. against 14·0 per cent. of the preceding year and 10·4 per cent. of the previous triennium. The total area irrigated during rabi 1915-16 is the highest on record.

6. The total revenue collected amounted to Rs. 6,46,213 against Financial results based on collections. Rs. 6,39,013 in 1914-15, and the working expenses to Rs. 3,57,977 against Rs. 3,90,082. The net revenue amounted to Rs. 2,88,236.

The uncollected balance of the assessment of occupier's rate was Rs. 187 only.

7. The total area irrigated was the third largest and the area matured General Remarks. the second largest on record while the failed area was lower than that of any previous year since 1901-02. The results of the year's working are, therefore, eminently satisfactory.

There was a marked reduction of swamping, largely due to the absence of high floods in the Indus.

The Sanawan drain, to which reference was made last year, continues to work well and is proving a useful object lesson to the people of the value of drainage. The Tall Masti and Sindhri drainages have been cleared and improved with satisfactory results.

The people are inclined to be blind to their own interests and to resent attempts to curtail the too lavish supply of water to tracts, liable to deterioration on account of rise of sub-soil water level. As they put it themselves, they prefer to die from drowning than from thirst. Fortunately the winter period, during which canals are closed and rivers are low, goes for to aid these lands in recovering from over saturation.

Satisfactory progress continues to be made in the substitution of iron pipes for open cuts and the cultivators at the tails fully appreciate the benefits derived from this procedure.

A new feeder for the Suleman canal from the Indus was dug during the year at a cost of Rs. 15,000, which, it is hoped, will greatly improve the supply of this canal.

SHAHPUR (PROVINCIAL) INUNDATION CANALS.

Capital amount. 1. No capital account is kept for these canals.

Extensions and Improvement. 2. No expenditure was incurred during the year.

Maintenance and repairs. 3. Rupees 19,349 was spent on maintenance and repairs, and on silt clearance.

Nature of seasons and state of demand and supply. The rainfall for the year was a failure, being only 3·43 inches as against 24·43 inches in the preceding year.

Demand for canal water was naturally very keen. Supply in the river was insufficient. The dates of opening and closing the canals were as follows :—

	Opening.	Closing.
Raniwah	..	21st April 1915
Corbynwah	..	19th April 1915

The corresponding dates of opening and closing averaged over the preceding 21 years were as follows :—

	Opening.	Closing.
Raniwah Canal	15th April 1915	14th September 1915
Corbynwah ,,	17th April 1915	12th September 1915

The Raniwah opened a week later and closed 19 days later than the average dates of the past whilst the Corbynwah opened 2 days later and closed 2 days earlier than the past average.

5. The area irrigated compares as follows with the averages of the two preceding triennia :—
Area irrigated.

Season.	Average of three years ending 1911-12.	Average of three years ending 1914-15.	Year 1915-16.
	Acres	Acres.	Acres.
Kharif	14,505	20,660	4,527
Rabi	8,952	10,551	14,367
Total ..	23,457	31,011	18,894

The figures for the kharif and rabi crops are not comparable with the averages of the two previous triennia because Executive Engineer, 1st Division, Lower Jhelum canal, transferred the whole kharif irrigation of grass to the rabi *khatauni* so as to have only one assessment *kharra* and *khatauni* for the year instead of two, but as this procedure was against the orders laid down in rules 20 and 21 of Sir James Wilson's rules for the assessment on Shahpur Canals, orders have been issued to the Executive Engineer to comply with the above rules infuture.

The considerable falling off of area from the averages of the last two triennia is due to the shortage of river supply and lack of rainfall.

Revenue was remitted on 1,164 acres (689 acres under tenancy rules and 475 acres for bad germination and bad cultivation).

6. The revenue receipts and expenditure of the year compare as follows with the figures of the previous triennium :—
Financial results based on collections.

Details.	Average, triennium 1912-15.	Year 1915-16.
Total assessment (direct and indirect)	Rs. 61.553	Rs. 34,241
Receipts (direct and indirect)	58,218	36,350
Working expenses	34,102	40,953
Net revenue ...	24,116	—4,594

There was a loss of Rs. 4,594 on the year's working which is due to lack of supply and rainfall during the year as well as to the fact that a considerable part of the area is irrigated free of water rates under tenancy rules. This area amounts to 689 acres.

7. (a) During the year an attempt was made to economise on working expenses by leaving gaps at the bottoms of all stop-dams where supply is headed up into distributaries, so as to keep greater silt carrying power in flow of the channels, lessen the deposit of silt there, and secure its being carried on into water-courses: the year was too abnormal for any firm conclusion to be drawn.
General Remarks.

(b) Irrigation throughout the system is by means of open cuts in the banks ; the substitution of outlets has never been attempted as it is considered better not to hinder the free flow off of flood supplies ; but as opportunity arises for doing so, with the consent and at the expense of zamindars, outlets of V form are being made here and there, consisting of a notch giving a reasonable supply with ordinary flow passing, the open shoulders of which will pass off a share of any excess during floods.

(c) The tail of the creek on which the Raniwah depends for its water-supply took a short cut to the river, leaving the Raniwah Canal. Western Feeder almost dry. The river has a set on the mouth of the creek and has thrown a great silt bar across it. A new head may have to be constructed soon, for so long as the bend in the channel continues, the conditions of supply are likely to remain unfavourable.

The creeks feeding this canal have also been silting up. Data of river levels are being collected to consider the question of constructing new heads.

RAVI INUNDATION CANALS.

In the Administration Report for the year 1914-15 it was stated that the only canal doing irrigation as an Inundation Canal under this system was the Jherku Canal in the Montgomery District. During the year under review this Jherku Canal was also excluded from the operation of the Punjab Minor Canals Act (Act III of 1905) and the area irrigated from that canal was brought under the command of the Lower Bari Doab Canal working under the Northern India Canal and Drainage Act (Act VIII of 1873).

Thus the Ravi Inundation Canals now cease to exist.

SIMLA ; }

T. R. J. WARD,

The 26th September 1916. }

Chief Engineer, Irrigation Works, Punjab.

GOVERNMENT OF THE PUNJAB.
PUBLIC WORKS DEPARTMENT.

IRRIGATION BRANCH.

PART II.

STATISTICAL STATEMENTS FOR THE YEAR 1915-16.

TABLE OF CONTENTS.

	PAGE.
I A. Statement of Canals in the Punjab	2-3
I B. Capital Account of the Irrigation Works in the Punjab Province for, and to end of, 1915-16.	4
I C. Statement showing Financial Results of Irrigation Works in the Punjab for the year ending 31st March 1916.	5-7
II C. Statement showing the Financial Results of Irrigation Works in the Punjab Province for, and up to the end of, 1915-16.	8-9
III C. Demands and Realizations, 1915-16	10
IV C. Financial Results based on Assessments	11
I D. Statement of Traffic on Canals in the Punjab during the year 1915-16.	12
II D. Description and Quantities of Raft Traffic on Canals in the Punjab during the year 1915-16.	13
E. Area irrigated on the Punjab Canals during 1915-16 with Appendices A and B, showing areas on which Occupiers' Rates and Owners' Rates were remitted.	14-20
II E. Incidence of Working Expenses and Assessed Water Revenue during 1915-16.	21
III E. Quantity and Value of Crops irrigated during 1915-16	22-25
IV E. Comparative Statement of Irrigation and Rainfall during 1914-15 and 1915-16.	26-7
I F. Statement showing Occupier's Rate and Owner's Rate in force on the Canals in the Punjab during 1915-16.	28-40

STATEMENT OF CANALS

PARTICULARS.	MAJOR IRRIGATION						
	Western Jumna Canal, including Sirsa Branch, British and Patiala.	SIRHIND CANAL		Upper Hari Canal.	Lower Hari Canal.	Upper Chenab Canal.	Lower Chenab Canal.
		British	Patiala Nabha and Jind States.				
1	2	3	4	5	6	7	8
Source of supply	Jumna.	Sutlej.		Revi.	Ravi and Chenab.	Chenab.	Chenab.
Minimum discharge of river { Ever recorded, cubic feet per second	2,167	2,780		1,272	220	3,884	3,884
During the year " "	2,167	3,385		1,975	220	4,334	4,323
Maximum discharge of canal { As designed " "	6,178	3,840	2,160	5,000	6,750	11,742	8,813
Now authorised " "	6,430	5,431	3,080	6,700	...	11,074	10,730
During the year " "	6,121	8,741		6,700	1,970	9,817	10,093
Average annual rainfall Inches	(a) 29.68	(b) 16.25	(b) 18.11	(d) 24.13	(k) 34.83	(e) 22.37	(e) 11.94
Gross area commanded Acres	2,735,288	2,568,132	1,954,560	1,782,560	1,661,590	1,580,859	3,823,210
Culturable area commanded	2,315,077	2,273,467	1,629,000	1,594,346	1,291,196	1,501,843	2,633,800
Area proposed to be irrigated annually. { By complete project " "	893,555	763,442	420,000	821,665	823,004	631,410	1,496,568
At present ... "	893,555	750,000	420,000	821,665	751,055	539,936	1,496,568
Sanctioned Estimate—							
Direct charges Rs.	1,05,64,269	2,29,18,998	1,44,67,175	1,57,23,565	2,10,69,940	3,61,31,583	2,55,81,173
Indirect charges "	7,50,277	12,78,126	...	...	6,58,462	12,23,441	8,31,791
Interest during construction... ... "	34,27,795	87,03,620	...	...	34,29,947	71,03,569	66,50,277
Total Estimate ... "	1,47,32,341	3,29,90,745	1,44,67,175	1,57,23,565	2,57,59,349	4,44,60,592	3,31,05,243
Expenditure to end of 1915-16. { Direct charges ... "	1,80,42,825	2,43,45,111	1,43,02,035	2,11,30,492	2,06,66,984	3,36,24,503	3,10,82,599
Indirect charges ... "	8,10,188	12,11,417	...	7,42,005	4,15,028	8,77,090	7,63,861
Interest during construction. ... "	32,08,964	85,45,401	...	1,64,07,038	32,06,967	71,68,668	64,52,313
Total Expenditure ... "	2,20,61,977	3,61,01,959	1,63,02,005	2,42,88,859	4,16,90,261	3,82,49,093	
Works as now executed—							
Main Canals, irrigation Miles	82	39	30	134	170	40	40
Branch Canals "	243	279	219	295			357
Branch Feeder Canals ... ... "	...	...	...	16	...	...	...
Lower Chautang Nala Canal ... "	4	...	...	...	...	...	...
Distributaries, irrigation "	1,880	1,689	1,811	1,564	1,050	1,136	2,287
Lower Chautang Nala Canal Distributaries ... "	45	...	...	...	...	...	...
Of above—							
Navigable Channels "	222	92	46	...	...	...	...
Works completed to end of 1915-16—							
Main Canals, irrigation "	82	39	30	134	170	40	40
Branch Canals "	243	279	219	295			357
Branch Feeder Canals ... ... "	...	...	...	16	...	...	...
Lower Chautang Nala Canal ... "	4	...	...	...	...	...	...
Distributaries, irrigation "	1,880	1,689	1,811	1,564	1,044	1,051	2,287
Lower Chautang Nala Canal Distributaries ... "	45	...	...	...	...	...	...
Of above—							
Navigable Channels "	222	92	46	...	...	...	...

Note.—Miles shown in this statement
Salampur and

- (a) Average rainfall for the last 37 years
- (b) Ditto ditto 32 do.
- (c) Ditto ditto 28 do.
- (d) Ditto ditto 14 do.
- (e) Ditto ditto 9 do.

A.
IN THE PUNJAR.

WORKS.

MINOR IRRIGATION WORKS.

9 Upper Jhelum Canal.	10 Lower Jhelum Canal.	11 Upper Sutlej Canals.	12 Sindhu Canal.	13 Indus Canals.	14 Shahpur (Imperial) Inundation Canals.	GHAZIAN INUNDATION CANALS.		16 Bikaner State.	17 Lower Sutlej Inundation Canals.	18 Chenab Canal.	19 Murdigarh Inundation Canals.	20 Shahpur (Provincial) Inundation Canals.
						British.	Bikaner State.					
Jhelum	Jhelum.	Sutlej.	Ravi.	Indus.	Jhelum.	Gha. g.	Sutlej.	Chenab.	Indus and Chenab.	Jhelum.		
Net reported	4,772	3,001	The river runs dry.	9,439	4,772	The river runs dry.	3,001	3,432	12,871	4,772		
	2,793	4,318		25,074	2,793		Not recorded.	5,600	Not recorded.	2,793		
8,590	3,900	4,935	2,120	Not known	1,100	1,000	500	5,653	5,163	7,534	933	
	K 3,750 R 3,750	...	2,005	...	1,100	1,100	600	...	...	...	932	
Net reported	3,896	32,367	2,015	6,982	636	1,162	207	7,391	5,713	10,590	522	
(d) 11,75	(f) 19,35	(g) 6,63	(h) 5,56	(g) 14,31	(i) 94	(j) 12,52	(k) 5,33	(l) 6,01	(m) 5,15	(n) 13,51		
638,106	1,369,393	989,730	350,077	879,105	67,067	86,324	41,901	918,208	463,473	771,311	60,923	
569,205	1,162,405	899,636	344,159	422,923	62,964	72,978	31,018	905,152	360,313	674,932	53,257	
544,960	665,921	319,697	150,000	306,760	47,750	46,834	17,309	250,000	200,000	350,000	27,000	
327,926	668,921	320,181	150,000	305,760	42,000	46,834	17,309	250,000	200,000	350,000	21,470	
4,3240,332	1,63,95,782	13,30,378	9,02,393	6,87,306	2,05,933	3,59,692	3,07,305	...	...	...	...	...
10,66,277	6,08,204	46,400	37,092	19,720	9,961	10,028	...	...	...	...	...	...
73,30,746	32,59,554	...	39,096	...	...	...	...	...	...	...	...	...
6,16,17,307	2,22,42,512	13,62,778	10,38,561	7,07,635	2,15,014	3,69,720	3,07,305	...	...	...	...	...
4,15,31,296	1,65,70,641	17,17,051	12,00,741	28,93,360	2,05,933	3,65,337	2,86,412	...	...	...	...	...
7,78,823	3,59,121	1,01,027	40,917	79,946	9,981	10,792	...	...	...	...	...	...
71,29,183	67,05,299	8,97,090	2,12,511	6,86,207	...	...	...	...	...	...	...	...
4,94,90,303	2,27,31,051	27,05,371	15,18,472	30,50,618	2,15,914	3,76,129	2,85,412	...	...	...	...	...
	83	39	326	68	443	53	44	53	400	207	418	33
	5	191	...	...	...	18	...	...	...	...	...	18

	...	1,011	395	262	303	72	34	...	318	63	737	62

	83	39	326	68	413	53	44	53	400	207	418	33
	5	192	...	...	...	19	...	...	...	...	...	18

	...	1,011	395	262	303	72	34	...	318	63	737	62

are canal miles of 5,000 feet.

Faridnagar Canals.

(1) Average rainfall for the last 23 years.

(2) Ditto ditto 27 do.

(3) Ditto ditto 49 do.

(4) Ditto ditto 17 do.

(5) Ditto ditto 13 do.

(6) Ditto ditto 6 do.

L.B.

CAPITAL ACCOUNT OF THE IRRIGATION WORKS IN THE PUNJAB PROVINCE FOR AND TO
END OF 1915-16.

I.C.

STATEMENT SHOWING THE FINANCIAL RESULTS OF IRRIGATION WORKS IN THE
PUNJAB PROVINCE FOR THE YEAR ENDING 31st MARCH 1916.

STATEMENT SHOWING THE FINANCIAL RESULTS OF IRRIGATION
REALIZATIONS UNDER MAIN HEADS OF

REVENUE ACTUAL RECEIPTS.

IRRIGATION.	IRRIGATION.					Navigation.	Plantation.	Water Power.	Miscellaneous.	Total.	Revenue of revenue less refunds.	Gross revenue less refunds.	
	Water-rate directly paid.	Share of land-revenue and sale-proceeds of w. site and other lands.	Owner's rate.	Total.									
1	2	3	4	5		6	7	8	9	10	11	12	
Productive Works.													
Western Jumna Canal, including Sis Branch.	Imperial Contribution	26,47,354	2,30,990	...	28,78,344	52,394	31,781	6,103	49,678	30,09,653	2,202	30,06,451	
Sirhind Canal	Imperial Contribution	28,00,250	80,851	...	28,88,810	11,010	28,574	1,17,739	1,71,018	22,28,051	746	32,37,340	
Upper Barid Doab Canal	...	21,68,707	...	...	21,68,707	6,139	13,729	48,712	24,973	22,60,270	18,418	(d) 22,46,652
Lower Barid Doab Canal	...	6,26,970	1,20,988	...	6,47,958	...	1,405	...	4,720	5,15,159	623	5,53,407	
Upper Chenab Canal	...	9,27,055	61,077	...	9,88,132	...	288	...	20,656	10,17,049	815	10,17,333	
Lower Chenab Canal	...	83,68,423	74,74,450	2,417	1,58,85,823	...	23,232	18,059	50,374	1,59,23,867	747	1,59,22,240	
Upper Jhelum Canal	...	...	...	...	...	...	...	...	...	6,204	30	6,236
Lower Jhelum Canal	...	25,60,563	14,72,343	...	40,32,906	...	7,854	30,237	31,636	41,22,563	730	41,21,785	
Upper Sutlej Inundation Canals	...	4,60,602	2,87,087	...	7,33,689	—	4,393	...	7,615	7,40,107	62	7,40,10	
Sukkur Canals	...	6,16,635	2,09,310	...	6,26,014	...	380	...	6,736	6,33,129	350	6,32,776	
Indus Inundation Canals	...	1,35,601	2,50,127	...	3,85,618	...	3,657	...	48,569	4,37,343	169	4,37,175	
TOTAL CANALS IN OPERATION	Imperial Contribution	2,27,65,432	1,07,92,333	2,417	3,35,90,183	63,303	1,14,018	2,81,636	5,47,103	3,45,57,412	7,639	3,45,58,604	
Works for which ONLY REVENUE ACCOUNTS ARE KEPT.													
Lower Sutlej Inundation Canal, including Hajwah	...	8,05,510	8,11,338	...	6,17,857	...	1,412	...	2,171	8,21,745	130	8,21,610	
Chenab Inundation Canals	...	3,04,177	3,63,190	...	4,63,367	...	1,632	...	1,426	4,71,055	201	4,71,304	
Muzaffargarh Inundation Canals	...	3,67,210	2,70,281	...	6,37,550	...	5,820	...	2,657	6,46,213	...	6,46,213	
TOTAL	...	7,77,043	9,45,812	...	17,23,754	...	8,070	...	8,754	17,30,578	301	17,30,167	
Works for which CAPITAL AND REVENUE ACCOUNTS ARE KEPT.													
Shahpur Canals	76,018	16,107	...	92,023	...	157	...	21	92,201	...	92,201
Ghaggar Canals	Imperial Contribution	17,628	...	...	17,628	...	...	...	2	37,550	...	17,540
TOTAL	Imperial Contribution	94,454	16,107	...	1,09,561	...	157	...	23	1,09,741	...	1,09,741	
Provincial.													
Shahpur Canals	20,277	6,457	...	35,734	625	36,359	...	36,359
Ravi Inundation Canals	...	...	982	669	...	1,270	...	...	...	1,270	...	1,270
TOTAL	...	29,059	7,915	...	37,001	...	...	...	625	37,629	...	37,629

(a) Includes Rs. 1,700 credited to Patiala State through.
 (b) and (c) Include Rs. 29,703 and Rs. 11,850, respectively.
 (d) Includes Rs. 80,615 passed through the Administrative.
 (e) " " 2,59,009, Rs. 60,582 and Rs. 34,240 spent.
 (f) " " 2,913 spent by the Bikaner State.
 (g) " " 6,107 " " " " "
 (h) " " Rs. 1 " " " " "

C.

WORKS IN THE PUNJAB PROVINCE FOR THE YEAR ENDING 31st MARCH 1916.

REVENUE AND WORKING EXPENSES.

REVENUE MANAGEMENT.					MAINTENANCE OF WORKS.														
ESTABLISHMENT.				Total.	ESTABLISHMENT.														
Direction.	Executive.	Navigation.	Civil Officers.	Total.	Direction.	Executive.	Mechan.	Total.	Works.	Repairs.	Structur.	Tools and plant.	Plantations.	Total cost of maintenance.	Total direction charges.	Indirect charges.	Grand total, Working Expenses.	Net Revenue.	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
38,030	3,29,635	180	72,673	4,84,729	10,960	1,60,002	11,711	1,51,663	1,17,501	5,69,607	1,173	22,373	20,129	8,69,305	13,23,043	61,971	16,05,614	16,00,037	
103	239	...	...	930	5,111	32,839	100	37,529	21,674	31,632	-126	854	1,256	9,2810	93,155	...	93,155	1,45,200
37,345	3,67,900	314	81,833	4,80,784	13,351	62,020	11,495	63,805	1,31,549	8,99,107	16	29,483	21,026	8,77,081	11,57,863	80,933	12,88,858	19,88,858	
2,610	11,726	...	...	16,430	32,471	82,466	3,346	100,808	1,60,328	5,21,003	8,179	12,774	3,805	8,16,610	9,31,046	...	8,31,046	14,15,806
40,316	3,90,163	...	1,00,032	5,58,377	18,584	21,371	5,378	60,107	66,282	5,07,614	236	16,920	84,598	7,46,067	11,63,341	60,221	18,72,665	33,46,404	
8,554	1,17,701	...	12,123	1,09,238	18,483	10,171	...	20,804	12,102	3,84,418	...	6,110	34,832	4,64,318	6,23,053	27,432	6,50,685	-87,469	
18,197	1,50,160	...	12,123	1,92,602	14,767	42,870	...	57,687	1,08,000	3,85,128	37,780	10,760	6,086	6,04,178	7,98,785	35,023	8,33,806	1,83,825	
63,885	6,63,633	...	2,47,123	8,63,223	21,976	1,48,419	23,436	1,09,671	9,70,039	9,37,171	551	56,152	60,225	29,80,039	31,10,865	1,53,133	32,71,803	1,98,50,317	
97	7,110	...	...	7,237	8,340	43,749	...	62,007	22,555	2,49,145	...	3,846	2,103	3,10,606	3,33,693	8,307	3,42,160	-3,35,816
41,355	2,32,724	...	71,023	4,05,876	8,403	24,315	10,693	23,270	21,061	2,26,135	623	21,303	33,729	3,44,050	7,53,008	64,791	6,17,860	38,93,024	
8,103	91,345	...	12,721	1,10,540	0,383	31,610	1,621	44,671	10,740	1,00,413	...	2,623	10,074	3,77,111	3,89,001	21,704	4,00,708	3,26,805	
4,327	61,410	...	5,320	71,212	768	8,009	1,470	7,901	10,610	37,780	...	2,761	5,273	6,426	1,35,197	11,105	1,45,502	6,26,157	
2,072	37,632	...	6,171	67,218	0,012	51,809	1,639	63,889	1,17,105	1,70,849	438	1,370	10,154	3,78,105	6,35,823	10,261	4,41,681	-4,405	
8,44,250	24,39,635	503	6,65,411	33,50,818	1,35,717	1,18,651	67,491	8,10,849	10,23,732	40,91,336	60,703	1,83,923	3,87,220	20,12,363	1,03,43,170	6,89,816	1,00,31,516	9,30,69,288	
2,743	12,23	...	...	14,773	25,623	1,14,985	3,435	1,41,072	1,91,033	5,63,025	2,053	13,628	5,053	6,68,420	9,24,301	...	9,24,301	16,64,100
6,060	63,013	..	8,014	65,059	8,471	31,147	1,501	39,170	54,237	1,03,003	-607	1,490	6,443	2,05,521	2,70,803	14,601	9,65,454	9,35,116	
6,353	11,707	...	5,379	25,223	5,910	10,410	...	22,380	13,214	82,564	...	826	6,340	1,40,023	1,05,251	7,041	1,75,502	2,02,072	
6,033	65,015	...	7,098	70,011	17,634	41,125	...	65,010	21,170	1,94,007	-8,331	3,370	11,300	2,62,514	3,40,055	17,602	3,67,077	2,58,235	
20,020	1,18,771	...	22,311	1,60,039	24,314	68,712	1,591	1,10,687	60,611	8,00,651	-0,030	6,393	23,035	6,15,901	7,70,100	20,624	8,15,723	6,23,401	
3,880	8,783	...	2,312	15,411	2,310	6,637	...	8,687	928	28,187	...	...	...	34,073	40,513	8,874	52,667	39,314
1,430	5,475	...	527	7,308	2,383	8,007	...	11,820	2,909	11,681	...	121	59	23,024	39,303	2,621	36,013	-18,473	
	253	3,829	...	3,851	1,163	11,426	...	(5)	50	19	16,645	16,685	...	16,685	-16,634
4,802	18,109	...	2,839	22,590	4,803	11,404	...	20,007	9,160	80,741	...	123	69	60,000	82,805	6,093	68,000	20,641	
	...	...	...	...	253	3,429	...	3,631	1,193	11,420	...	58	10	16,645	16,685	...	16,685	-16,634
2,700	6,603	...	783	8,714	3,670	7,078	...	10,264	...	10,329	...	...	...	20,683	38,297	5,053	40,853	-6,892
2,193	...	...	2	2,000	...	...	...	...	...	...	...	...	...	...	2,030	203	3,883	-1,118
4,107	6,603	...	783	10,501	2,070	7,078	...	10,254	...	10,329	...	...	...	20,683	40,887	3,910	43,880	-6,707

The Administrative Accounts of the Province,
actually spent by the Patiala State on maintenance of State Channels.
Accounts of the Province
by the Native States of Patiala, Nabha and Jind, respectively.

II

STATEMENT SHOWING THE FINANCIAL RESULTS OF IRRIGATION

Number of works.	Name of works.	GENERAL FINANCIAL RESULTS TO END OF 1915-16.									
		Mileage in operation.		Estimated cost of construction (direct and indirect).	Date of completion of work (P. W. Code M., 1916).	Date when system first came into operation.	Total capital outlay (direct and indirect).	Accumulated interest.	Accumulated surplus revenues.	Total sum-at-charge (column 7 + column 8).	
		Main Canals and Branches.	District Canals.								
1	2	3	4	5	6a	6b	7	8	9	10	
MAJOR WORKS.											
PRODUCTIVE WORKS.											
1	Western Jumna Canal, including Sirsa Branch.	Imperial (a) 294	Miles. (b) 1,679	Rs. 1,75,46,063	Western Jumna Canal—1886 Sirsa Branch—1885	Date 1820 1891-92	Rs. 1,76,92,535 11,60,478	Rs. ...	Rs. 5,16,24,492	Rs. 1,76,92,535	
2	Sirhind Canal.	Imperial Contribution. 218	Miles. 1,589	Rs. 2,56,04,802	1886-87	1888-89	Rs. 2,55,56,558 1,43,02,005	Rs. ...	Rs. 1,57,86,629	Rs. 2,55,56,558	
3	Upper Bari Doab Canal.	325	Miles. 1,580	Rs. 2,14,78,885	1878-79	1880-81	Rs. 2,18,72,497	Rs. ...	Rs. 4,25,85,999	Rs. 2,18,72,497	
4	Lower Bari Doab Canal.	134	Miles. 1,044	Rs. 2,23,28,402	Still in progress	1913-14	Rs. 2,10,81,092	Rs. 31,81,409	Rs. ...	Rs. 2,42,03,401	
5	Upper Chenab Canal	170	Miles. 1,051	Rs. 3,73,57,034	Ditto	1912-13	Rs. 3,45,01,593	Rs. 68,04,331	Rs. ...	Rs. 4,13,05,924	
6	Lower Chenab Canal	427	Miles. 2,287	Rs. 8,18,11,647	1899-1900	•	Rs. 8,17,98,780	Rs. ...	Rs. 11,40,60,690	Rs. 3,17,96,780	
7	Upper Jhelum Canal	88	Miles. ...	Rs. 4,42,90,650	Still in progress	1915	Rs. 4,23,61,119	Rs. 74,65,099	Rs. ...	Rs. 4,98,26,218	
8	Lower Jhelum Canal	181	Miles. 1,011	Rs. 1,89,63,988	Ditto	1901	Rs. 1,59,65,762	Rs. ...	Rs. 1,88,76,621	Rs. 1,59,65,762	
9	Upper Sutlej Inundation Canals.	326	Miles. 895	Rs. 17,97,414	Upper Sutlej—1858-59 Lower Sohag and Para, 1886	1855 1884	Rs. 18,18,381	Rs. ...	Rs. 30,29,427	Rs. 18,18,381	
10	Sidhnai Canals	... 68	Miles. 252	Rs. 12,97,874	1886	1886	Rs. 18,30,961	Rs. ...	Rs. 59,38,520	Rs. 18,30,961	
	Indus Inundation Canals.	443	Miles. 803	Rs. 29,23,413	1849-50 Prior to 1849	1849	Rs. 29,73,305	Rs. 7,40,866	Rs. ...	Rs. 37,14,172	
	Imperial ... Total Contribution	2,774 254	Miles. 11,041 1,982	Rs. 22,53,93,576 1,55,80,013	... ...	...	Rs. 21,69,51,484 1,54,62,483	Rs. 1,81,91,905	Rs. 24,67,98,478	Rs. 28,51,43,189
MINOR WORKS.											
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.											
12	Shahpur Canal	... 66	Miles. 72	Rs. 2,15,914	1870-71	1870	Rs. 2,15,914	Rs. ...	Rs. 10,69,246	Rs. 2,15,914	
3	Ghaggar Canal.	Imperial Contribution. 44 53	Miles. 34 ..	Rs. 8,76,129 2,85,442	1898-99 ...	1897 ...	Rs. 8,76,129 2,85,442	Rs. 10,54,885 ...	Rs. ...	Rs. 14,31,014	
	Imperial ... Total Contribution	110 53	Miles. 108 ..	Rs. 5,92,043 2,85,442	... ...	... ...	Rs. 5,92,043 2,85,442	Rs. 10,54,885 ...	Rs. 10,69,246	Rs. 16,46,928
	WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.
14	Lower Sutlej Inundation Canals.	400	Miles. 818	... 1895	Prior to annexation of the Punjab by the British.	... ...	... ...	... ...	Rs. 71,27,239	... ...
15	Murshaffargarh Inundation Canals.	418	Miles. 737	... 1896	Prior to annexation of the Punjab by the British.	... ...	... ...	... ...	Rs. 75,24,837	... ...
16	Chomab Inundation Canals.	267	Miles. 63	... 1895	Prior to annexation of the Punjab by the British.	... ...	... ...	... ...	Rs. 66,14,415	... ...
	Total Provincial.	... 1,085	Miles. 1,116	... ...	... ...	... ...	... ...	... ...	Rs. 2,12,06,491	... ...
17	Shahpur Canal	... 56	Miles. 52	... ...	... ...	... ...	... ...	... ...	Rs. 2,57,004	... ...
18	Ravi Canal	... ...	Miles. ...	... ...	... ...	... ...	... ...	... ...	Rs. 2,57,004	... ...
	Total	... 56	Miles. 52	... ...	... ...	... ...	... ...	... ...	Rs. 2,57,004	... ...

* Opened as an Inundation
 (a) Includes 4 miles and (b) 45 miles
 (c) Includes recoveries made by
 (d) Includes Rs. 11,821 spent

WORKS FOR, AND UP TO THE END OF, 1915-16.

FINANCIAL RESULTS OF THE YEAR 1915-16.

Gross receipts (direct and indirect). --- 11	Working expenses (direct and indirect). --- 12	Net revenue. --- 13	Percentage on capital outlay, column 7. --- 14	Percentage on net charge, column 10. --- 15	Interest at 3.4775 per cent. on direct capital outlay to end of previous year, plus half the outlay of the year. --- 16	Net profit. --- 17	Net loss. --- 18	Area irrigated. --- 19 Acres.	Percentage of working expenses to receipts (column 11 to column 12). --- 20 %
Rs. --- 11	Rs. --- 12	Rs. --- 13	% --- 14	% --- 15	Rs. --- 16	Rs. --- 17	Rs. --- 18	Acre. --- 19	% --- 20
30,06,351	14,05,414	16,00,937	9·04	9·01	5,85,986	10,14,951	...	761,334	46·74
(e) 2,41,461	93,155	1,48,298	12·77	12·77	...	...	- 58,969	68,749	38·68
32,27,340	12,38,858	19,68,482	7·78	7·78	8,44,273	11,44,209	...	927,059	38·38
(g) 22,46,852	8,31,043	14,15,608	9·90	9·90	...	...	- 3,67,670	680,008	36·89
47,18,969	13,72,565	33,46,404	15·29	15·29	7,27,855	26,18,549	...	1,145,234	29·08
5,53,497	6,50,985	-- 87,488	48	40	7,02,171	...	7,99,659	283,204	117·61
10,17,938	8,38,808	1,83,625	58	44	11,46,873	...	9,68,347	325,062	81·96
1,59,22,240	32,71,903	1,26,50,247	39·78	39·78	10,76,007	1,15,74,240	...	2,284,079	20·55
6,284	8,42,150	-- 3,85,916	79	67	14,11,009	...	17,46,925	...	5,488·46
41,21,763	8,17,659	33,03,924	20·7	20·7	5,40,661	27,68,263	...	834,176	19·84
7,48,108	4,09,708	3,38,395	18·50	18·50	59,438	2,76,957	...	272,746	54·81
8,32,779	1,46,692	6,88,187	51·65	51·65	44,888	6,41,849	...	270,150	17·55
4,37,175	4,41,684	-- 4,408	14	11	97,918	...	1,02,822	235,641	101·00
3,45,80,804	1,09,31,516	2,36,58,288	10·90	10·08	72,97,028	2,00,38,518	88,12,253	7,838,775	31·60
24,88,008	9,24,201	15,64,102	10·11	10·11	...	1,64,21,265	...	643,757	87·14
92,201	52,887	89,314	18·20	18·20	7,151	82,103	...	26,769	57·36
17,540	86,018	-- 18,478	4·91	1·29	12,686	...	81,169	22,006	205·31
1 (d) 16,585	-- 16,584	— 5·81	— 5·81	— 5·81	...	...	4,768	3,168	...
1,09,741	88,900	20,841	3·62	1·26	19,837	32,163	81,159	48,725	,81·00
1 16,585	-- 16,584	— 5·81	— 5·81	— 5·81	...	1,004	5,763	3,168	...
6,21,610	2,85,454	8,86,156	...	...	...	8,86,156	...	233,572	45·92
6,40,218	8,57,977	2,88,236	...	...	...	2,88,236	...	377,395	3·95
471,964	1,72,292	2,99,072	...	...	...	2,99,072	...	170,435	36·33
17,99,187	8,15,723	9,29,464	...	...	...	9,23,464	...	831,452	46·90
36,359	40,953	-- 4,694	...	...	...	...	4,694	18,894	112·63
1,270	2,363	-- 1,113	...	...	...	...	1,113	...	187·63
37,629	48,886	-- 5,707	...	...	...	...	5,707	18,894	115·16

Canal in 1887 and as a perennial Canal in 1892,
of the Lower Chautang Nala Canal,
Native States and credited in their books,
by the Bikaner State.

III C.

STATEMENT SHOWING DEMANDS AND REALIZATIONS IN THE PUNJAB PROVINCE
FOR THE YEAR 1915-16.

Name of Canal.	Balance of demands remaining unrealized at the commencement of the year.	Demand during the year.	Total.	Defuncted remissions not including cash refunds.	Net amount.	Actual realizations.	Amount unrealized at the close of the year.
1	2	3	4	5	6	7	8
XXIX—MAJOR WORKS—DIRECT RECEIPTS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Water or occupier's rate.							
Western Jumna Canal ...	7,738	26,72,196	26,79,934	81,081	26,48,853	26,47,854	1,499
Sirhind Canal ...	28,903	23,77,166	30,08,094	61,308	29,44,786	28,09,289	1,35,496
Upper Hari Doab Canal ...	12,165	38,79,548	38,91,703	50,951	38,41,452	38,26,496	14,986
Lower Hari Doab Canal ...	6,923	6,21,193	6,27,419	1,95,024	4,31,485	4,26,079	4,516
Upper Chenab Canal ...	60,649	10,79,533	11,40,181	2,97,150	9,33,031	9,27,058	5,978
Lower Chenab Canal ...	6,960	83,55,893	83,62,727	5,961	83,56,832	83,55,425	—1,593
Lower Jhelum Canal ...	4,637	26,85,298	25,80,085	9,635	26,86,300	25,80,568	6,797
Sidhu Canal ...	4,250	6,15,621	6,19,671	18	6,10,658	6,10,656	3,173
Upper Sutlej Inundation Canals ...	4,108	4,81,865	4,69,063	17,092	4,71,971	4,66,002	5,069
Indus Inundation Canals ...	91,659	1,64,899	1,90,498	75	1,06,423	(a) 1,81,869	14,534
Total occupiers' rates ...	1,67,379	2,81,36,112	2,30,03,491	5,72,491	2,30,31,030	2,23,41,810	1,89,380
Owner's rate.							
Lower Chenab Canal ...	461	1,785	2,226	...	2,226	2,417	—191
XXX—MINOR WORKS AND NAVIGATION—IMPERIAL.							
Lower Sutlej Inundation Canals ...	26	2,72,343	2,72,208	...	2,72,268	2,72,091	177
Muzaffargarh Inundation Canals ...	620	2,67,002	2,67,022	160	2,67,488	2,67,246	187
Chenab Inundation Canals ...	8,811	1,98,571	2,07,332	...	2,07,383	2,04,177	6,205
Hajinah Canal ...	...	34,428	34,428	...	34,423	34,428	...
Shalpur Inundation Canals ...	...	77,078	77,078	172	76,906	76,916	—10
Ghaggar Inundation Canals ...	3	17,826	17,829	201	17,598	17,538	...
Total ...	9,460	8,67,147	8,76,607	652	8,75,935	8,72,300	3,559
PROVINCIAL.							
Shalpur Canal ...	—149	35,348	35,109	5,879	29,320	22,977	43
Rati Canal ...	...	382	382	...	3·2	383	...
Total ...	—149	35,730	35,581	5,879	29,702	22,650	43

(a) Includes Rs. 46,178 on account of Dhundi Estate.

IV C.

STATEMENT SHOWING THE FINANCIAL RESULTS OF THE IRRIGATION WORKS IN THE PUNJAB PROVINCE FOR THE YEAR 1915-16 BASED ON ASSESSMENTS OF THE YEAR 1915-16 AND PRINCIPAL RESULTS OF OPERATIONS FOR THE YEAR ENDING 31ST MARCH 1916.

IRRIGATION WORKS.	Capital outlay, direct and indirect, to end of the year 1915-16.	REVENUE ASSESSED DURING THE YEAR.										Working Expenses—Direct and Indirect.	Net assessed revenue of the year.	Percentage on capital outlay to end of the year.	
		DIRECT ASSESSED RECEIPTS.													
		Occupier's rate.	Owner's rate.	Plantation.	Water-power.	Irrigation.	Miscellaneous.	Total.	Indirect receipts.	Grand Total.	12	13	14		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
PRODUCTIVE WORKS,															
Western Jumna Canal { Imperial ..	Rs. 1,70,62,726	Rs. 28,19,221	Rs. ...	Rs. 21,761	Rs. 6,263	Rs. 52,261	Rs. 49,678	Rs. 20,49,430	Rs. 2,30,090	Rs. 31,70,420	Rs. 14,05,411	Rs. 17,74,006	10.03		
including Sirsa Branch. Contribution ..	11,60,478	2,21,518	... 437	827	... 2,720	2,23,051	... 2,720	2,23,051	... 2,720	2,23,051	93,155	1,34,630	11.42		
Birbhad Canal { Imperial ..	Rs. 2,57,56,558	Rs. 30,60,072	Rs. ...	Rs. 23,574	Rs. 1,17,735	Rs. 11,010	Rs. 1,71,815	Rs. 30,09,316	Rs. 80,551	Rs. 40,67,867	Rs. 12,38,558	Rs. 29,49,009	11.14		
Contribution ..	1,13,01,003	24,01,676	... 12,720	49,712	6,124	24,623	25,85,040	... 25,85,040	... 25,85,040	Rs. 8,31,018	17,54,003	12.26			
Upper Bara Doab Canal ..	Rs. 2,18,72,497	Rs. 38,39,501	Rs. ...	Rs. 24,338	Rs. 1,13,162	Rs. ...	Rs. 1,30,872	Rs. 41,15,907	Rs. 6,16,203	Rs. 47,32,500	Rs. 13,72,565	Rs. 33,50,535	15.36		
Lower .. " .. "	Rs. 2,10,81,923	Rs. 1,82,710	Rs. ...	Rs. 1,478	Rs. ...	Rs. ...	Rs. 4,720	Rs. 4,02,718	Rs. 1,20,956	Rs. 6,16,000	Rs. 6,60,695	Rs. -31,280	0.16		
Upper Chenab	Rs. 9,47,61,623	Rs. 113,41,503	Rs. ...	Rs. 263	Rs. ...	Rs. ...	Rs. 29,515	Rs. 113,74,315	Rs. 61,077	Rs. 14,35,392	Rs. 8,30,838	Rs. 6,01,691	1.74		
Lower	Rs. 3,17,67,760	Rs. 30,014	Rs. 21,463	Rs. 22,322	Rs. 15,070	Rs. ...	Rs. 10,571	Rs. 81,81,242	Rs. 61,61,630	Rs. 1,66,02,772	Rs. 32,71,003	Rs. 1,33,30,770	41.02		
Upper Jhelum	Rs. 5,23,61,110	Rs. ...	Rs. ...	Rs. ...	Rs. ...	Rs. ...	Rs. 6,201	Rs. 6,201	Rs. ...	Rs. 6,204	Rs. 32,180	Rs. -3,58,985	-0.70		
Lower	Rs. 1,59,63,772	Rs. 27,31,418	Rs. ...	Rs. 7,674	Rs. 20,267	Rs. ...	Rs. 31,550	Rs. 28,03,078	Rs. 14,72,518	Rs. 45,75,418	Rs. 8,17,950	Rs. 36,67,569	21.65		
Upper Sutlej Irrigation Canals ..	Rs. 18,10,291	Rs. 51,795	Rs. ...	Rs. 4,103	Rs. ...	Rs. ...	Rs. 7,845	Rs. 3,61,033	Rs. 2,01,273	Rs. 6,63,300	Rs. 4,02,09	Rs. 1,55,593	8.69		
Sidhu Canal ..	Rs. 12,50,181	Rs. 47,168	Rs. ...	Rs. 369	Rs. ...	Rs. ...	Rs. 6,735	Rs. 4,77,003	Rs. 2,00,320	Rs. 6,60,632	Rs. 1,10,692	Rs. 5,40,010	40.67		
Indus Irrigation Canals ..	Rs. 22,51,918	Rs. 1,67,000	Rs. ...	Rs. 2,757	Rs. ...	Rs. ...	Rs. 48,648	Rs. 2,10,301	Rs. 2,60,227	Rs. 4,10,501	Rs. 4,41,794	Rs. 27,077	0.91		
TOTAL .. { Imperial ..	Rs. 81,00,51,181	Rs. 19,52,170	Rs. 23,603	Rs. 1,14,048	Rs. 2,52,795	Rs. 3,01	Rs. 6,47,101	Rs. 7,62,73,012	Rs. 1,14,03,191	Rs. 5,76,57,501	Rs. 1,00,91,516	Rs. 2,77,16,016	11.86		
Contribution ..	Rs. 1,51,02,163	Rs. 27,18,181	... 13,160	Rs. 5,038	Rs. 0,121	Rs. 27,032	Rs. 29,14,070	... 29,14,070	... 29,14,070	... 29,14,070	Rs. 9,21,201	Rs. 16,89,880	15.23		
WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE EXPT.															
Rohapur Canals ..	Rs. 2,13,015	Rs. 55,270	Rs. ...	Rs. 167	Rs. ...	Rs. ...	Rs. 21	Rs. 17,419	Rs. 10,037	Rs. 65,335	Rs. 62,687	Rs. 13,409	6.25		
Ghaggar Canals { Imperial ..	Rs. 3,76,117	Rs. 18,707	Rs. ...	Rs. ...	Rs. ...	Rs. ...	Rs. 3	Rs. 16,531	Rs. ...	Rs. 18,602	Rs. 36,013	Rs. -17,501	-4.65		
Contribution ..	Rs. 2,50,442	Rs. 8,409	Rs. ...	Rs. ...	Rs. ...	Rs. ...	Rs. 7,453	Rs. 8,515	Rs. ...	Rs. 6,663	Rs. *10,585	Rs. -8,022	-5.10		
TOTAL .. { Imperial ..	Rs. 8,02,047	Rs. 73,717	Rs. ...	Rs. 127	Rs. ...	Rs. ...	Rs. 23	Rs. 73,027	Rs. 10,037	Rs. 81,601	Rs. 68,900	Rs. -1,006	-0.97		
Contribution ..	Rs. 2,65,442	Rs. 8,204	Rs. ...	Rs. 84	Rs. ...	Rs. ...	Rs. 183	Rs. 8,071	Rs. ...	Rs. 8,103	Rs. 16,531	Rs. -8,022	-0.10		
Works for which ONLY REVENUE ACCOUNTS ARE EXPT.															
Lower Sutlej Irrigation Canals ..	Rs. ...	Rs. 2,84,731	Rs. ...	Rs. 1,415	Rs. ...	Rs. ...	Rs. 2,471	Rs. 2,6,014	Rs. 3,11,338	Rs. 6,70,823	Rs. 2,95,454	Rs. 2,91,409	...		
Chenab Irrigation Canals ..	Rs. ...	Rs. 1,78,170	Rs. ...	Rs. 1,632	Rs. ...	Rs. ...	Rs. 1,120	Rs. 1,78,428	Rs. 2,01,100	Rs. 4,22,614	Rs. 1,73,292	Rs. 2,70,333	...		
Murshidabad Irrigation Canals ..	Rs. ...	Rs. 2,76,648	Rs. ...	Rs. 6,129	Rs. ...	Rs. ...	Rs. 2,657	Rs. 2,84,371	Rs. 3,70,281	Rs. 6,61,063	Rs. 3,67,077	Rs. 2,06,678	...		
Total ..	Rs. ...	Rs. 7,14,560	Rs. ...	Rs. 0,70	Rs. ...	Rs. ...	Rs. 6,704	Rs. 7,31,413	Rs. 0,45,612	Rs. 16,27,025	Rs. 8,15,723	Rs. 8,01,502	...		
PROVINCIAL WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE EXPT.															
Rohapur Canals ..	Rs. ...	Rs. 27,393	Rs. ...	Rs. ...	Rs. ...	Rs. ...	Rs. 626	Rs. 26,008	Rs. 0,233	Rs. 31,211	Rs. 40,033	Rs. -6,712	...		
Kayi Irrigation Canals ..	Rs. ...	Rs. ...	Rs. ...	Rs. ...	Rs. ...	Rs. ...	Rs. ...	Rs. ...	Rs. 694	Rs. 656	Rs. 3,263	Rs. -1,196	...		
Total ..	Rs. ...	Rs. 27,393	Rs. ...	Rs. ...	Rs. ...	Rs. ...	Rs. 626	Rs. 26,008	Rs. 7,315	Rs. 35,023	Rs. 41,920	Rs. -7,083	...		

* Includes Rs. 11,631 spent by the Rikhan State.
† Includes Rs. 164 reported by the Rikhan State.

I. D.

STATEMENT OF TRAFFIC ON CANALS IN THE PUNJAB DURING THE YEAR 1915-16.

Particulars.		Western Jumna Canal.	Sirhind Canal.
Length of channel open for navigation ...	... Miles	222	138
Receipts—			
Tollage on private boats ...	... Rs.	57	1,894
" " Government boats	... "	...	...
" " rafts	... "	52,227	15,264
Carrying operations or transport service—			
Hire of Government boats	... "	...	...
Refund of revenue	... "	18	127
Total receipts	... "	52,266	17,031
Maintenance charges, including special Navigation Establishment	"	5,153	5,757
Net Revenue of year	... "	47,113	11,274
Total number of boats plying cargo	...	...	...
" " " passengers	...	...	...
Total registered tonnage cargo	...	...	...
" " " passengers	...	...	...
Ton mileage, Up (a)	...	...	...
Down	...	...	...
	Total	...	...
Estimated value of cargoes, Up (a)	... Rs.	...	...
" " " Down	... "	...	...
	Total	...	...
Number of passengers	...	...	20,605
Rafts, Up	... C. ft.	...	1,696,996
" Down	... "	2,090,975	...
	Total	2,090,975	1,696,996
Estimated value of rafts	... Rs.	14,53,417	11,72,252
Tollage on boats per ton per mile (a)	... "	...	...
" " rafts per 100 c. ft.	... "	2.49	0.89

(a) Details of boat traffic are not recorded (Government of India, Public Works Department, No. 78-I, dated 22nd April 1892).

II D.

DESCRIPTION AND QUANTITIES OF RAFT TRAFFIC ON CANALS IN THE PUNJAB DURING THE YEAR 1915-16.

Particulars.	WESTERN JUMNA CANAL.						SIRHIND CANAL.						TOTAL.								
	Total.			PRIVATE.			Total.			PRIVATE.			Quantity in tons.			Value.			Quantity.		
	Quantity in tons.	Value.	Quantity.	Value.	Quantity in tons.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity in tons.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Pounds.	Rs.	
PAPER.	Up.	Down.	Total.	Rs.	T. Rs.	Rs.	Up.	Down.	Total.	Rs.	Tons.	Rs.	Up.	Down.	Total.	Rs.	Tons.	Rs.			
Timber in logs, round and squared	...	231	231	16,971	231	16,871	...	363	363	17,743	253	13,631	...	604	34,613	494	30,563	13	...		
Sleepers, broad gauge	...	23,235	23,235	7,15,763	23,235	7,15,762	...	23,345	23,345	875,160	23,214	832,917	...	40,580	1,632,931	45,440	1,551,709	...	...
" metal "	...	9,129	9,129	2,33,636	9,129	2,33,636	...	6,816	6,816	139,681	5,093	133,683	...	14,445	14,445	370,217	1,5,222	3,73,319	...		
Scantlings	9,116	9,116	483,148	9,116	483,148	...	2,161	2,161	139,630	1,933	129,665	...	11,277	11,277	631,978	11,059	6,12,813	...	
Bamboos and reeds	930	930	...	64	64	930	64	930	64	930	
Firwood		
Total	...	41,721	41,721	1,158,417	41,721	1,158,417	...	31,249	31,249	1,172,252	20,577	1,110,916	...	72,970	72,970	2,630,669	71,295	2,569,233	...		

I. E. WITH APPENDICES A AND B.

STATEMENT OF AREAS IRRIGATED BY IRRIGATION WORKS IN THE PUNJAB DURING THE YEAR 1915-16.

NAME OF CANALS.	AREA IRRIGATED, IN ACRES.										AVERAGE DISCHARGE, IN CUSECS.		AREA IRRIGATED, PER CUSEC.		
	KHAIR.		Rabi.		TOTAL.		Flow.		Lift.		DOWNS CHOPPED.		AT HEAD LOSS.		
	Irrigated.	Assessed.	Irrigated.	Assessed.	Irrigated.	Assessed.	Flow.	Lift.	Area irrigated.	Percent area irrigated.	Kharif.	Rabi.	Kharif.	Rabi.	
Number of days canal was in flow.	2	3	4	5	6	7			10		11	12	13	14	
Major Irrigation Works.															
Western Jumna Canal (including Sirsa Branch, British and Patiala).	163	163	361,275	355,091	463,809	451,178	825,033	803,269	689,970	16,113	66,393	6,279	4,403	2,488	82
Sirhind Canal (British)	171	183	292,862	299,051	634,197	605,400	921,059	894,157	922,193	4,566	126,466	13,61	2,973	2,853	99
" " (Patiala, Nuhha and Jind States).	171	183	209,052	207,237	370,915	370,901	690,008	577,811	575,823	4,185	115,753	19,95	2,217	2,064	2,038
Upper Hari Doh Canal ..	174	153	452,014	450,052	655,290	612,383	1,145,234	1,125,375	1,125,153	19,751	230,139	20,53	5,931	2,491	1,591
Lower Hari Doh Canal ..	183	181	111,971	99,037	105,420	114,477	233,529	209,111	232,423	871	4,015	14	2,536	1,404	1,221
Upper Chenab Canal ..	168	183	159,152	155,510	162,113	165,310	325,092	317,953	325,116	2,916	15,479	4,76	3,108	1,628	2,177
Lower Chenab Canal ..	151	193	632,142	649,225	1,631,517	1,587,859	2,534,079	2,237,285	2,237,077	37,072	16,856	7,22	8,934	7,078	7,205
" Jhelum Canal ..	178	170	216,957	199,023	617,319	613,973	834,176	811,895	831,953	2,923	11,893	179	3,213	3,155	2,631
Upper Sutlej Canals ..	16	1	134,187	127,612	138,559	139,559	272,745	260,171	260,077	3,070	23,958	971	3,131	2,908	87
Sidhu Mai Canals ..	115	27	117,079	98,371	152,151	151,678	270,150	223,219	223,213	5,035	910	034	1,638	1,688	100
Inlets Foundation Canals ⁴	143	10	139,124	102,147	97,517	79,552	235,611	153,029	225,085	8,956	4,835	205	3,181	3,181	74
Total ..	...	...	2,886,678	2,733,350	5,034,551	4,995,232	7,932,582	7,635,514	7,635,514	...	...	...	...	...	94
Minor Irrigation Works.															
Shahpur (Imperial) Inundation Canals	118	4	9,429	7,617	17,330	15,430	21,769	23,047	21,739	20	...	...	506	506	53
Gangotri Inundation Canals (British)	28	25	{ 4,218	4,178	17,788	17,039	22,093	21,817	22,006	...	...	...	416	416	53
" " (Bikaner)	12	6	3,150	2,101	3,108	2,105	3,163	3,163	3,163	...	...	...	118	118	53
Lower Sutlej Inundation Canals ..	146	36	122,335	91,608	161,237	150,145	283,572	221,813	255,354	19,218	61	002	1,956	1,956	145
Chenab Inundation Canals ..	120	...	84,107	61,789	81,378	82,063	170,485	141,852	139,731	2,101	800	050	2,304	2,304	74
Muzaffargarh Inundation Canals ..	115	20	137,979	125,751	239,416	225,233	377,395	351,934	373,407	3,939	63,172	13,82	5,469	5,469	69
Shahpur (Provincial) Inundation Canals ⁵	107	4,597	4,071	14,337	13,639	18,891	17,750	18,934	18,934	...	355	18	354	354	53
Total ..	...	...	303,607	295,079	639,672	504,270	504,270	504,270	504,270	800,319	...	...	...	...	...

* Excludes 39,035 acre remitted under Tenancy rules.

APPENDIX A TO STATEMENT I. E.

STATEMENT SHOWING AREAS ON WHICH OCCUPIERS' RATES WERE REMITTED
DURING THE YEAR 1915-16.

CAUSE OF REMISSION.	Kharif, 1915.				Rabi, 1915-16.			
	Area assessed.	Area remitted.	Total area irrigated.	Percentage remitted.	Area assessed.	Area remitted.	Total area irrigated.	Percentage remitted.
1	2	3	4	5	6	7	8	9
WESIERR JUMNA CANAL.								
1. Wrong assessment	91	...	...	40	...	...
2. Escape irrigation	1	...	...
3. Under Tenancy Rules	11	...	...	9,080	...	...
4. Short supply	1,231	...	...	...	...	...
5. Hail	1	...	...	...	...	...
6. Frost
7. High wind	21	...	...	104	...	...
8. Flooding { (a) by heavy rain	46	...	...	31	...	...
{ (b) from canal	90	...	...	...	...	...
9. Rats
10. Locusts	1,791	...	...	1	...	...
11. Other insects and blight	1,708	...	...	710	...	...
12. Bad germination or cultivation	319	...	...	2,163	...	...
13. Bad soil	1	...	...	12	...	...
14. High land	93	...	...
15. Miscellaneous	213	...	...	385	...	...
Total	355,691	(A) 6,151	361,275	1.71	451,178	(A) 12,630	453,803	2.72
SIRHIND CANAL (IMPERIAL).								
1. Wrong assessment
2. Escape irrigation
3. Under Tenancy Rules	29	...	...	27,868	...	...
4. Short supply	12	...	...	3	...	...
5. Hail	52	...	...
6. Frost	1	...	...	9	...	...
7. High wind	1	...	...	...	...	...
8. Flooding { (a) by heavy rain	31	...	...	14	...	...
{ (b) from canal	1	...	...
9. Rats	1,642	...	...	2	...	...
10. Locusts	223	...	...	97	...	...
11. Other insects and blight	261	...	...	95	...	...
12. Bad germination or cultivation	504	...	...	4	...	...
13. Bad soil	9	...	...	...	...	...
14. High land	1	...	...	617	...	...
15. Miscellaneous	690	...	...	...	...	...
Total	250,031	3,611	202,862	1.30	605,403	28,791	631,107	4.54
UPPER BARI DOAB CANAL.								
1. Wrong assessment	27	...	...	82	...	...
2. Escape irrigation	6	...	...	...	...	...
3. Under Tenancy Rules	766	...	...	12,209	...	...
4. Short supply
5. Hail	56	...	...
6. Frost
7. High wind	43	...	...	...	...	...
8. Flooding { (a) by heavy rain	98	...	...	30	...	...
{ (b) from canal	18	...	...	...	...	...
9. Rats	20	...	...	...	...	...
10. Locusts	736	...	...	35	...	...
11. Other insects and blight	6,981	...	...	86	...	...
12. Bad germination or cultivation	40	...	...	01	...	...
13. Bad soil	47	...	...	...	...	...
14. High land	24	...	...	429	...	...
15. Miscellaneous	1,191	...	...	...	...	...
Total	450,652	9,892	450,012	2.02	612,823	12,807	656,290	1.98
LOWER BARI DOAB CANAL.								
1. Wrong assessment	1,034	...	...
2. Escape irrigation	27,944	...	...
3. Under Tenancy Rules	10,114	...	...	1,277	...	...
4. Short supply	11	...	...	...	...	...
5. Hail	20	...	...
6. Frost
7. High wind	43	...	...	...	...	...
8. Flooding { (a) by heavy rain	9	...	...	...	...	...
{ (b) from canal
9. Rats	21	...	...	100	...	...
10. Locusts	237	...	...	31	...	...
11. Other insects and blight	267	...	...	8,350	...	...
12. Bad germination or cultivation	2,919	...	...	4,823	...	...
13. Bad soil	5,168	...	...	122	...	...
14. High land	835	...	...	11,097	...	...
15. Miscellaneous	5,271	...	...	...	...	...
Total	80,037	21,337	114,074	21.16	118,477	49,813	104,320	92.61

(A) Detail of area remitted :-

	Kharif.	Rabi.
In the four Divisions	... 6,366	19,324
In Patiala State	... 604	108
In Jind State	... 524	198
Total	... 6,184	19,030

**STATEMENT SHOWING AREAS ON WHICH OCCUPIERS' RATES WERE REMITTED
DURING THE YEAR 1915-16—CONTINUED.**

CAUSE OF REMISSION.	Kharif, 1915.					Rabi, 1915-16.						
	Area assessed.		Area remitted.		Total area irrigated.	Percentage remitted.	Area assessed.		Area remitted.		Total area irrigated.	Percentage remitted.
	1	2	3	4			6	5	7	8		
UPPER CHENAB CANAL.												
1. Wrong assessment	Acres.	Acres.	Acres.		Acres.	Acres.	Acres.	Acres.		
2. Escape irrigation		
3. Under Tenancy Rules		
4. Short supply		
5. Hail	243	1	...		...	...	...	...
6. Frost		
7. High wind		
8. Flooding { (a) by heavy rain		
{ (b) from canal	8	...		...	...	...	...
9. Rats		
10. Locusts		
11. Other insects and blight	216	...		...	...	...	...
12. Bad germination or cultivation	2,237	...		...	...	...	...
13. Bad soil	143	...		...	...	...	...
14. High land		
15. Miscellaneous		
16. Perpetual remission	764	...		...	...	...	...
17. Dog Nallah		
Total	...	155,510	3,612	158,152	2.32		162,413	3,497	165,910	2.16		
LOWER CHENAB CANAL.												
1. Wrong assessment		
2. Escape irrigation		
3. Under Tenancy Rules		
4. Short supply		
5. Hail	888	...	...		...	...	...	...
6. Frost	36	...	...		...	...	...	...
7. High wind		
8. Flooding { (a) by heavy rain	62	...	...		...	...	...	...
{ (b) from canal	51	...	...		...	...	...	...
9. Rats	4	...	...		...	...	...	...
10. Locusts	833	...		...	...	...	...
11. Other insects and blight	83	...	...		...	...	...	...
12. Bad germination or cultivation	63	...	...		...	...	...	...
13. Bad soil	842	...	...		...	...	...	...
14. High land	473	...	...		...	...	...	...
15. Miscellaneous	32	...	...		...	...	...	...
Total	...	619,423	2,717	623,142	0.41		1,587,959	41,078	1,631,937	2.70		
LOWER JHELUM CANAL.												
1. Wrong assessment		
2. Escape irrigation		
3. Under Tenancy Rules	1,007	...		...	...	...	...
4. Short supply	10	...		...	...	...	...
5. Hail		
6. Frost		
7. High wind		
8. Flooding { (a) by heavy rain		
{ (b) from canal		
9. Rats		
10. Locusts	62	...		...	...	...	...
11. Other insects and blight	13,134	...		...	...	...	...
12. Bad germination or cultivation	3,777	...	...		...	...	...	...
13. Bad soil		
14. High land	619	...	...		...	...	...	...
15. Miscellaneous	225	...	...		...	...	...	...
Total	...	108,023	16,834	216,857	8.69		613,873	3,416	617,319	0.26		
UPPER SUTLEJ INUNDATION CANALS.												
1. Wrong assessment		
2. Escape irrigation		
3. Under Tenancy Rules		
4. Short supply	3,092	...		...	...	...	...
5. Hail		
6. Frost		
7. High land		
8. Flooding { (a) by heavy rain		
{ (b) from canal		
9. Rats	29	...		...	...	...	...
10. Locusts	0	...		...	...	...	...
11. Other insects and blight	323	...		...	...	...	...
12. Bad germination or cultivation	2,162	...		...	...	...	...
13. Bad soil		
14. High land		
15. Miscellaneous		
Total	...	127,012	6,675	133,167	4.90		138,659	...	138,659	...		

**STATEMENT SHOWING AREAS ON WHICH OCCUPIERS' RATES WERE REMITTED
DURING THE YEAR 1915-16—CONTINUED.**

CAUSE OF REMISSION.	Kharif, 1915.				Rabi, 1915-16.				
	Area assessed.	Area remitted.	Total area irrigated.	Percentage remitted.	Area assessed.	Area remitted.	Total area irrigated.	Percentage remitted.	
1	2	3	4	5	6	7	8	9	
SIDHNAY CANALS.									
1. Wrong assessment	
2. Escape irrigation	
3. Under Tenancy Rules	
4. Short supply	4,144	..	..	..	..	..
5. Hail	
6. Frost	
7. High wind	
8. Flooding { (1) by heavy rain	
{ (2) from canal	
{ (3) from river	
9. Rats	
10. Locusts	
11. Other insects and blight	
12. Bad germination or cultivation	8,205	..	..	..	..	..
13. Bad soil	9,079	..	..	..	..	..
14. High land	
15. Miscellaneous	
Total	..	98,571	19,428	117,999	16·48	124,076	27,473	152,151	18·06
INDUS INUNDATION CANALS.									
1. Wrong assessment	
2. Escape irrigation	
3. Under Tenancy Rules	
4. Short supply	15,650	..	..	..	..	..
5. Hail	
6. Frost	
7. High wind	101	..	..	..	..	..
8. Flooding { (1) by rain	
{ (2) from river	
{ (3) hill torrent	
9. Rats	
10. Locusts	
11. Other insects and blight	
12. Bad germination or cultivation	
13. Bad soil	10,356	..	..	..	..	..
14. Soma water	24	..	..	..	..	..
15. Scanty rain	
16. Miscellaneous	
Total	..	102,147	35,977	138,124	26·04	79,882	17,636	97,517	18·07
CHENAB INUNDATION CANALS.									
1. Wrong assessment	
2. Escape irrigation	
3. Under Tenancy Rules	
4. Short supply	9,760	..	..	..	..	..
5. Hail	
6. Frost	
7. High wind	
8. Flooding { (1) by rain	
{ (2) from canal	
{ (3) from river	
9. Rats	
10. Locusts	
11. Other insects and blight	
12. Bad germination or cultivation	
13. Bad soil	7,846	..	..	..	..	..
14. High land	4,688	..	..	..	..	..
15. Miscellaneous	29	..	..	..	..	..
Total	..	61,789	22,818	84,107	28·53	80,063	6,816	86,378	7·81

STATEMENT SHOWING AREAS ON WHICH OCCUPIERS' RATES WERE REMITTED
DURING THE YEAR 1915-16—CONTINUED.

CAUSE OF REMISSION.	Kharif, 1915.				Rabi, 1915-16.			
	Area assessed.	Area remitted.	Total area irrigated.	Percentage remitted	Area assessed.	Area remitted.	Total area irrigated.	Percentage remitted
1	2	3	4	5	6	7	8	9
LOWER SUTLEJ INUNDATION CANALS.								
1. Wrong assessment
2. Escape irrigation
3. Under Tenancy Rules	16,649	...	...	...	1,434	...
4. Short Supply
5. Hail
6. Frost
7. High wind	87	...	...	...	...	...
8. Flooding { (a) by heavy rain (b) from canal	81	...	...	...	...	...	...
9. Rats	8	...	...	...	...	...
10. Locusts	808	...	...	...	...	...
11. Other insects and blight	5,642	...	...	...	...	...
12. Bad germination or cultivation	7,327	...	...	...	4,033	...
13. Bad soil	120	...	...	...	5,625	...
14. High land
15. Miscellaneous
Total ...	81,668	80,667	122,335	25.07	150,145	11,002	161,237	6.88
MUZAFFARGARH INUNDATION CANALS.								
1. Wrong assessment
2. Escape irrigation
3. Under Tenancy Rules	5,026	...	...	...	3,020	...
4. Short supply
5. Hail
6. Frost
7. High wind	396	...	...	...	148	...
8. Flooding { (a) by heavy rain (b) from canal (river)
9. Rats	74	...	...	...	...	...	...
10. Locusts	841	...	...	...	1,654	...
11. Other insects and blight	3,757	...	...	...	8,190	...
12. Bad germination or cultivation	1,134	...	...	...	1,171	...
Total ...	126,751	11,322	137,079	8.18	225,233	14,183	230,416	5.92
SHARPUR IMPERIAL CANALS.								
1. Wrong assessment
2. Escape irrigation
3. Under Tenancy Rules	220	...	...	...	642	...
4. Short supply	202	...
5. Hail
6. Frost
7. High wind
8. Flooding { (a) by heavy rain (b) from canal
9. Rats	1,414	...	...	...	943	...
10. Locusts	140	...	...	...	114	...
11. Other insects and blight	88	...	...	...	...	...
12. Bad germination or cultivation
13. Bad soil
14. High land
15. Miscellaneous
Total ...	7,617	1,812	9,429	19.21	15,430	1,900	17,330	10.96

STATEMENT SHOWING AREAS ON WHICH OCCUPIERS' RATES WERE REMITTED
DURING THE YEAR 1915-16—CONCLUDED.

CAUSE OF REMISSION.	Kharif, 1915.				Rabi, 1915-16.			
	Area assessed.	Area remitted.	Total area irrigated.	Percentage remitted	Area assessed.	Area remitted.	Total area irrigated.	Percentage remitted.
	1	2	3	4	5	6	7	8	9
GHAGGAR CANALS.								
1. Wrong assessment	Acres	Acres.	Acres.	Acres.	Acres.	Acres.
2. Escape irrigation
3. Under Tenancy Rules
4. Short supply
5. Hail
6. Frost
7. High wind
8. Flooding { (a) by heavy rain (b) from canal }
9. Rats
10. Locusta
11. Other insects and blight
12. Bad germination or cultivation
13. Bad soil
14. High land
15. Miscellaneous
Total ...	4,183	(A) 47	4,270	1.11	10,740	(B) 1,204	20,944	5.75
SHAHPUR PROVINCIAL CANALS.								
1. Wrong assessment
2. Escape irrigation
3. Under Tenancy Rules
4. Short supply
5. Hail
6. Frost
7. High wind
8. Flooding { (a) by heavy rain (b) from canal }
9. Rats
10. Locusta
11. Other insects or blight
12. Bad germination or cultivation	450	...	...	...	19	...
13. Bad soil
14. High land
15. Miscellaneous
Total ...	4,071	450	4,527	10.07	13,059	708	14,367	4.91
						(A)	(B)	
British	40	149	
Bikaner	7	1,055	
					Total ...	47	1,204	

APPENDIX B TO STATEMENT I. E.

STATEMENT SHOWING AREAS ON WHICH OWNERS' RATES WERE REMITTED
DURING THE YEAR 1915-16.

CAUSE OF REMISSION.	Kharif, 1915.			Rabi, 1915-16.		
	Area assessed.	Area remitted.	Percentage remitted.	Area assessed.	Area remitted.	Percentage remitted.
LOWER CHENAB CANAL CIRCLE.						
1. Wrong assessment
2. Escape irrigation
3. Under Tenancy Rules
4. Short Supply
5. Hail
6. Frost
7. High wind
8. Flooding { (a) by heavy rain
(b) from canal
9. Rats
10. Locusts
11. Other insects and blight
12. Bad germination or cultivation
13. Bad soil
14. High land
15. Miscellaneous
Total

三

STATEMENT SHOWING INCIDENCE OF WORKING EXPENSES AND ASSESSED WATER REVENUE ON THE CANALS IN THE PUNJAB DURING 1915-16.

^aIncludes Rs 32,496 actually spent by the Patiala State.

[†] Figures reported by the Tidewater State.

STATEMENT OF QUANTITY AND VALUE OF CROPS

NAME OF CROPS.			WESTERN JUMNA CANAL.		SIRHIND CANAL (BRITISH).		SIRHIND CANAL (NATIVE STATES' BRANCHES).		UPPER BARI DOAB CANAL.	
English.	Vernacular.	Scientific.	Area assessed to waterworks.	Estimated value.	Area assessed to waterworks.	Estimated value.	Area assessed to waterworks.	Estimated value.	Area assessed to waterworks.	Estimated value.
1	2	3	4	5	6	7	8	9	10	11
Cereals			Acre.	Rs.	Acre.	Rs.	Acre.	Rs.	Acre.	Rs.
Wheat	Gehun	Triticum sativum	231,153	62,06,915	200,651	1,13,11,467	100,701	40,22,016	214,187	86,23,315
Barley	Jau	Hordeum vulgare	18,460	4,71,996	151,912	43,32,026	—	—	6,211	1,67,610
Rice	Jhona	Oryza sativa	22,296	7,10,432	—	—	—	—	41,24,080	41,24,080
Maize	Sankli	Zea mays	3,271	1,49,079	58,363	13,65,910	5,347	1,10,714	35,47,167	35,47,167
Oats	Jari	Avena sativa	631	21,920	—	—	—	—	10,66,983	10,66,983
Mixed Grain	Berra	—	89,799	20,61,840	—	—	15	—	4,495	1,50,560
Miscellaneous	—	—	3,331	71,083	—	—	2	—	42,14,333	42,14,333
Millets and Pulses			—	—	—	—	—	—	21,705	4,78,830
Great Millet	Jawar	Setaria italica	89,491	22,15,025	—	—	11,277	2,63,421	2,121	1,00,001
Spiked Millet	Dogra	Panicum capense	23,183	4,01,670	—	—	711	—	741	1,18,081
Italian Millet	Kausani	Setaria Italica	118	2,340	—	—	—	—	70	1,330
Morset	Mandvi	Eleusine coracana	152	5,020	—	—	—	—	—	—
Gram	Chuna	Panicum frumentaceum	19,624	13,01,074	115,175	26,49,025	—	—	35	700
Lentil	Masoor	Cicer arietinum	6,159	1,59,729	576	7,689	30,629	7,01,614	63,092	14,70,100
Peas	Mirchi	Pisum sativum	4,197	98,750	—	—	—	—	240	50
—	Methi	Phaseolus radiatus	474	8,469	61	2,570	121	—	69	8,400
—	Mung	Phaseolus mungo	221	4,423	—	—	625	—	630	14,163
—	Moth	Phaseolus acutifolius	600	10,000	1,07	16,575	71	1,700	144	4,000
Mixed Grain	Gaur	Cyperus pseudoloides	17,071	2,01,985	41,181	12,74,101	5,719	81,478	18,423	3,56,075
—	Purwa	—	1,337	37,110	—	—	—	—	171	4,15,370
—	Chenna	Paspalum milletaceum	—	—	31	—	—	—	3,160	4,930
Miscellaneous	Mandal	—	1,632	22,659	—	—	—	—	10	3,170
Drugs and Spices			—	—	—	—	—	—	5	75
Tobacco	Tarmukhi	Nicotiana tabacum	617	28,820	—	—	—	—	1,501	1,27,610
Poppy	Pot	Papaver somniferum	—	—	22	—	—	—	—	—
Aniseed and Dill	Alwala	Pimpinella sativa	1	40	—	—	—	—	—	—
Pennyroyal	Methi	Trigonella foenum-graecum	13,747	8,11,175	301	6,000	—	—	217	5,425
Coriander	Dhania	Coriandrum sativum	—	—	57	—	—	—	69	5,250
Cumin	Zira	Cuminum officinale	—	—	—	—	3	—	—	—
Turmeric	Haldi	Curcuma longa	—	—	—	—	—	—	21	1,470
Arisoi	Sunf	Pimpinella anethum	—	—	—	—	—	—	28	810
Miscellaneous	Kasai	—	—	—	70	1,610	—	300	—	30
Fibres			—	—	—	—	—	—	—	—
Cotton	Pui	Gossypium herbaceum	105,231	30,95,793	1,961	48,762	13,529	4,42,821	89,293	26,47,700
Bo-ella hemp	San	Hibiscus cannabinus	622	11,070	724	9,273	2,022	38,070	1,264	23,920
Talis hemp	Sanni	Crotona junccea	631	10,020	—	—	—	—	659	1,983
Miscellaneous	Manjiana	Saccharum meja	—	—	—	—	—	—	—	—
Dyes			—	—	—	—	—	—	—	—
Indigo	Nil	Indigofera tinctoria	5,117	1,57,023	—	—	—	—	—	—
Henna	Mehndi	Lawsenaia alba	—	—	—	—	—	—	—	—
Safflower	Karambi	Carthamus tinctorius	—	—	—	—	—	—	—	—
Miscellaneous	—	—	—	—	—	—	—	—	—	—
Oil-seeds			—	—	—	—	—	—	—	—
Groundnut or Sesame	Til	Sesamum indicum	65	1,075	74	932	16	963	2,761	63,378
Rape	Sreen	Brassica campestris	12,800	2,71,082	4,233	1,10,223	6,529	1,61,614	7,717	2,16,510
Do.	Tela	B. (Var. toria)	—	—	1,363	26,034	1,12	4,712	6,118	15,18,011
Linedex Fox	Taramita	Erigeron annua	1	21	301	0,264	167	4,682	707	20,074
Miscellaneous	Alsi	Linnun eriocalyx	1	21	6	130	8	294	571	20,281
Fruits and Vegetables			—	—	—	—	—	—	—	—
Orchards	—	—	—	—	—	—	—	—	—	—
Chillies	Mirch	Capicum annuum	737	70,151	103	10,670	216	21,620	902	63,143
Melons	Kharibaz	Cucumis melo	1,455	91,250	3,002	1,62,100	1,622	61,930	8,104	37,76,161
Carrots	Gajar	Ducus carota	631	27,410	—	—	217	25,778	112	6,723
Onions	Bulb	Lepidium sativum	151	4,523	12	230	24	1,753	—	500
Turnip	Piaz	Allium cepa	128	6,100	—	—	10	—	341	19,735
Water-nuts	Sugam	Brassica rapa	103	5,760	610	23,670	—	—	601	30,243
Gardens	Singhara	Trapa bicornis	0,713	0,21,241	—	—	1,522	1,52,200	8,954	65,02,300
Potatoes	Alo	Solanum tuberosum	103	12,700	616	61,620	1,522	1,52,200	317	31,200
Vegetables	Tarkari	—	2,128	1,74,960	1,723	1,29,400	917	24,180	4,403	3,05,420
Miscellaneous	Lekhan	—	—	—	110	330	—	—	122	3,620
Fodder			—	—	—	—	—	—	—	—
Lucerne grass	Lucen grass	Medicago sativa	1,007	26,250	89	1,751	5	121	431	20,463
“	Sangi	Do.	22	345	24,473	5,62,700	22,512	4,76,210	9,210	20,76,300
Grass	Ghus	—	121	2,610	103	4,870	707	16,150	1,12	18,225
Millet, etc.	Charkhi	—	16,517	4,16,175	165,813	40,71,333	1,00,073	39,69,250	60,705	24,21,242
Sugarcane	Mains	Saccharum officinarum	70,167	80,31,217	1,007	1,25,800	2,351	3,02,608	213	41,08,623
“	Stafal	—	—	—	77	4,752	—	10,101	—	—
Miscellaneous	Melhra	—	—	—	—	—	—	—	5	100
	Total	—	796,014	3,17,91,049	890,204	2,76,64,673	671,019	1,78,94,021	1,103,980	4,22,51,070
Fallows	—	—	4,001	—	1,401	—	5,748	—	1,970	—
Salt-watering	—	—	—	—	—	—	505	—	16,017	—
Plantations	—	—	—	—	—	—	—	—	247	—
Miscellaneous	—	—	1,472	—	702	—	—	—	122	—
Water of water	—	—	165	—	—	—	—	—	—	—
Palaver	—	—	4,519	—	—	—	—	—	—	—
	GRAND TOTAL	—	800,300	3,17,91,049	890,207	2,76,64,673	677,511	1,78,94,020	1,122,975	4,22,51,070

E.

IRRIGATED IN THE PUNJAB DURING THE YEAR 1915-16.

LOWER BARI DOAB CANAL.		UPPER CHENAB CANAL.		LOWER CHENAB CANAL.		LOWER JHELUM CANAL.		UPPER SUTLEJ INUNDATION CANAL (INCLUDING LOWER SONAD AND PABA).		SINDHAI CANAL.	
to Area assessed water-rates,	Estimated value.	to Area assessed water-rates,	Estimated value.	to Area assessed water-rates,	Estimated value.	to Area assessed water-rates,	Estimated value.	to Area assessed water-rates,	Estimated value.	to Area assessed water-rates,	Estimated value.
12	13	14	15	16	17	18	19	20	21	22	23
Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.
86,052	23,82,378	80,801	20,72,703	1,070,114	3,63,68,000	883 124	1,50,10,676	45,070	11,05,018	23,186	27,43,453
4,406	1,18,684	6,313	1,04,132	20,797	4,78,531	11,713	3,10,700	1,003	5,07,078	70,920	3,06,581
3,078	2,11,483	10,210	6,00,029	35,613	17,88,216	4,271	2,31,075	21,079	13,01,114	17,541	6,6,603
18,579	4,00,200	8,761	2,71,654	106,270	32,45,250	21,420	4,47,200	6,440	1,75,122	2,069	...
1,511	61,440	...	...	610	24,700	11,391	4,56,810	73	23,230	...	...
18	540	1,142	31,263	8,260	2,60,070	...	...	20,621	16,18,720	...	...
2	40	100	2,000	...	...	...	...	...	...	1,430	23,600
8,681	1,64,770	18,674	3,28,150	50,937	10,01,613	72,618	12,32,772	...	...	10,160	3,07,211
7,070	2,01,674	1,513	31,278	51,329	5,10,821	20,547	5,45,223	7,657	1,83,492	3,312	65,113
610	11,000	10	250	299	7,250	12	300	803	20,075	61	1,220
...	...	101	2,100	312	4,810	412	6,180	...	...	404	8,080
3,072	12,231	11,175	1,04,078	67,651	11,45,559	19,717	3,44,212	20,390	5,320	14,632	2,47,041
2,718	2,20	315	9,465	5,743	10,15,550	4,676	1,40,250	81	3,060	1,293	10,365
1,344	25,767	...	...	2,090	1,000	1,000	37,700	10	299	1,730	25,750
...	233	8,400	111	100	27,000	71	1,000	783	1,23	9,324	1,10,310
1,001	11,475	24	7,000	10,342	2,75,075	5,074	41,250	65	1,20	189	3,782
678	21,050	7	171	1,007	2,57,421	3,030	1,00,100	373	0,125	812	12,630
...	2,612	70,800	111	100	2,920	50,100	...	6,130	1,20,720	...	...
1	...	82	640	37	740	7,181	1,75,775	788	10,670	3,163	47,745
...	...	101	1,615	6	20	...	...	...	...	...	...
218	10,810	67	4,210	3,620	23,061	1,418	1,13,440	31	2,040	...	...
...
46	1,920	...	...	312	6,850	11	440	...	...	...	...
22	640	...	...	537	21,400	33	1,000	...	...	112	4,450
...	...	...	...	4	160	481	18,210	300	12,210	...	...
...	...	...	...	63	2,720	6	180	55	2,210	...	...
...	...	...	...	285	4,277	...	...	...	...	10	150
18,593	4,63,418	3,472	69,070	163,471	27,02,478	11,971	1,30,483	11,814	8,07,101	22,022	2,80,280
133	3,020	201	3,030	402	3,700	615	19,310	303	1,000	110	2,380
9	240	46	1,361	2,155	70,070	20	600	78	1,110	...	...
...	...	11	11	88	...	...	...	...	...	...	...
...	...	38	1,000	25	1,000	3	80	...	...	350	1,050
...	...	...	...	14	420	202	6,000	81	1,000	...	...
...	...	...	...	60	1,800	255	7,650	...	...	...	...
11,710	2,92,070	634	14,832	1,712	86,032	781	16,712	9,205	1,00,975	7,671	1,89,175
9,734	97,770	5,072	10,416	75,177	11,65,207	5,812	1,22,660	182	4,81,217	187	3,015
22,024	5,21,100	27,104	4,80,008	180,014	70,26,425	81,225	30,09,405	611	10,071	1,460	47,400
1,075	40,020	1,047	24,070	2,702	70,029	7,001	1,63,625	867	9,175	1,893	42,325
53	623	70	1,008	3,112	23,085	623	12,020	13	2,025	...	...
...	...	5	100	...	...	...	...	...	...	...	...
...	7	...	...	701	19,000	61	8,200	112	5,700	...	...
4,679	2,43,407	473	23,070	37,070	18,07,000	17,174	8,71,270	87	2,010	...	...
16	850	1	40	273	11,179	205	8,200	49	1,610	...	...
...	...	3	705	10	770	18	491	...	...	...	...
6,643	2,01,720	6,047	5,30,611	20,070	22,07,000	27,020	10,61,100	13,022	5,20,650	15,008	3,00,160
22	3,200	37	9,700	2,781	2,78,100	1,613	1,61,300	212	23,700	126	12,000
946	20,220	202	18,070	6,632	4,70,640	1,435	1,00,480	76	4,000	138	8,350
8	150	200	0,000	278	6,840	111	3,320	76	4,000	...	...
137	6,670	3	100	21,850	10,74,000	2,783	1,37,670	14	700	...	...
2,810	7,670	6,070	1,000	110,200	31,00,000	14,700	4,23,400	661	19,000	...	...
405	10,070	7,663	1,27,700	5,172	7,00,000	2,004	2,11,320	19,716	1,12,150	5,027	8,905
17,970	63,610	8,177	2,45,410	99,770	20,86,220	6,008	1,60,160	40,418	14,62,810	19,007	8,60,130
40	1,225	2,771	10,775	8,080	2,02,170	4,379	1,08,075	5	125	617	6,375
451	63,126	8,076	5,36,762	60,855	40,86,770	5,001	3,00,810	1,580	1,73,125	617	6,375
237	7,175	16	400	6,018	1,01,325	1,014	42,850	228	5,700	2,778	45,100
3,679	77,630	321	6,460	1,202	21,071	4,61,681	078	18,700	2,778	2,340	...
212,776	63,80,322	503,011	1,31,60,480	2,228,701	7,10,70,073	407,913	2,60,04,712	7,04,071	61,17,761	223,210	55,21,107
4,016	...	503	...	...	510	...	...	...	...	...	...
59	...	3	...	8,403	...	3,000	...	120	...	...	...
...	...	...	...	1	...	12	...	...	...	...	...
...
...
217,122	63,30,493	317,963	1,24,60,460	2,237,284	7,10,70,303	611,906	2,60,00,312	2,60,171	61,47,760	223,210	55,20,107

STATEMENT OF QUANTITY AND VALUE OF CROPS IRRIGATED

Names of Crops.			India Irrigation Canals.		Shantipur (Imperial) Irrigation Canals.		Ghaggar Canals (British).		Ghaggar Canals (British).	
English.	Vernacular.	Scientific.	Area assessed to water-rates.	Estimated value.	Area assessed to water-rates.	Estimated value.	Area assessed to water-rates.	Estimated value.	Area assessed to water-rates.	Estimated value.
1	2	3	4	5	6	7	8	9	10	11
Cereals—										
Wheat	Gehun	Triticum sativum	Acre.	Rs.	Acre.	Rs.	Acre.	Rs.	Acre.	Rs.
Bulley	Jao	Hordeum vulgare	14,174	31,94,143	11,311	3,73,923	4,292	1,53,713	52	3,045
Rice	Jhona	Oryza sativa	2,610	3,010	101	3,773	75	19,625	12	15,700
Maize	Makki	Zea mays	41,778	13,30,112	298	15,730	5,550	117,010	—	—
Oats	Jawi	Avena sativa	26	453	102	2,774	—	—	—	—
Mixed Grain	Berra	—	—	—	171	6,540	—	—	—	—
Miscellaneous	—	—	—	—	—	—	4,913	1,20,325	802	30,050
Millets and Pulses—										
Great Millet	Jawar	Sorghum vulgare	19,465	3,70,215	—	—	238	6,000	—	50
Spike Millet	Bajra	Panicum americanum	13,579	4,63,051	543	14,248	—	—	—	—
Italian Millet	Kangri	Setaria italica	58	2,610	—	—	—	—	—	—
—	Mandwa	Eleusine coracana	59	1,150	—	—	—	—	—	—
Gram	Rawnak	Panicum frumentaceum	595	13,660	7	140	—	—	—	—
Lentil	Chana	Cicer arietinum	11,071	1,82,100	2,330	61,414	6,512	1,23,723	258	4,561
Peas	Shirir	Erismus lens	133	3,900	163	6,480	—	—	—	—
—	Bawali	—	—	—	—	—	—	—	—	—
—	Bhattar	—	—	—	—	—	—	—	—	—
—	Methi	Phaseolus radiatus	4,970	1,21,250	—	—	—	—	—	—
—	Mung	Phaseolus mungo	11	440	—	—	—	—	—	—
—	Moth	Phaseolus acutifolia	1,022	40,620	—	—	—	—	—	—
Mixed Grain	Goor	Phaseolus polystachoides	261	21,000	26	650	—	—	—	—
—	Berra	Cyamopsis tetragonolobus	—	—	—	—	—	—	—	—
Miscellaneous	Cheena	Panicum miliaceum	—	—	78	1,950	—	—	—	—
—	Maddal	—	117	2,810	—	—	—	—	—	—
Drugs and Spices—										
Tobacco	Tarsaku	Nicotiana tabacum	—	—	95	2,600	—	—	—	—
Poppy	Poet	Papaver somniferum	—	—	—	—	—	—	—	—
Aniseed and Dill	Afreen	Pritchettia swainii	1,679	73,150	—	—	—	—	—	—
Fenugreek	Methi	Trigonella foenum-graecum	—	—	—	—	—	—	—	—
Coriander	Dhania	Coriandrum sativum	—	—	—	—	—	—	—	—
Cumin	Zira	Cuminum officinale	24	920	—	—	—	—	—	—
Turmeric	Haldi	Curcuma longa	73	2,920	—	—	—	—	—	—
Aniseed	Paant	Curcuma longa	—	—	—	—	—	—	—	—
Miscellaneous	Kosri	Plumbago zeylanica	10	600	—	—	—	—	—	—
Fabres—										
Cotton	Rei	Gossypium herbaceum	11,003	2,63,688	1,254	15,048	—	—	—	—
Rosella hemp	San	Hibiscus cannabinus	—	—	3	80	—	—	—	—
False hemp	Sanni	Crotalaria juncea	—	—	—	—	—	—	—	—
Miscellaneous	Musjkana	Saccharum munja	—	—	—	—	—	—	—	—
Dyes—										
Indigo	Nil	Indigofera tinctoria	—	—	—	—	—	—	—	—
Henna	Mehandi	Lavandula officinalis	1,062	42,450	4	—	120	—	—	—
Safflower	Kasumba	Carthamus tinctorius	—	—	—	—	—	—	—	—
Miscellaneous	—	—	—	—	—	—	—	—	—	—
Oil-seeds—										
Girgelly or Sesame	Til	Sesamum indicum	—	—	—	—	—	—	—	—
Rape	Sorson	Brassica campestris	474	14,940	48	1,127	—	—	—	—
Do.	Toria	Do (Var. toria)	162	4,220	49	1,101	490	10,470	155	3,165
Linseed flax	Taramita	Linum usitatissimum	3,620	50,725	—	—	514	6,524	82	1,239
Miscellaneous	Ast	—	—	—	—	—	—	—	—	—
Fruits and Vegetables—										
Orchards	—	—	—	—	—	—	—	—	—	—
Chillies	Mirch	Capsicum annuum	215	16,040	—	—	—	—	—	—
Melons	Kharbuta	Cucumis melo	14	870	62	2,600	—	—	—	—
Carrots	Gajar	Daucus carota	27	915	—	—	—	—	—	—
Cress	Halm	Lepidium sativum	—	—	—	—	—	—	—	—
Onions	Palz	Allium cepa	21	970	—	—	—	—	—	—
Turnips	Saleem	Braueria rapa	3,71	1,22,440	678	38,120	4	160	—	—
Water-nuts	Singham	Trapa bicornis	—	—	4	—	—	—	—	—
Gardens	Alu	Solanum tuberosum	254	23,400	63	6,000	—	—	—	100
Potatoes	Tarkari	—	520	36,470	20	2,730	—	—	—	16
Vegetables	Lehsan	—	—	—	—	—	—	—	—	—
Miscellaneous	—	—	—	—	—	—	—	—	—	—
Fodder—										
Lucerne Grass	Lusun ghans	Medicago sativa	—	—	—	—	—	—	—	—
Grass	Sejji	Do. var	2	40	—	—	—	—	—	—
Millets, etc.	Ghas	—	—	—	—	—	—	—	—	—
Sugarcane	Chandi	Saccharum officinarum	8,559	34,43,960	2,005	70,120	—	—	—	—
—	Mains	—	—	20	3,203	67,240	—	—	—	—
Miscellaneous	Goms	—	65	10,625	26	2,054	—	—	—	—
—	Shafat	—	120	3,000	—	—	—	—	—	—
—	Methra	—	—	—	—	—	—	—	—	—
Fallows	Total	—	162,029	85,69,954	23,047	7,17,075	21,603	5,67,771	2,106	51,723
Single watering	—	—	—	—	—	—	—	—	—	—
Plantations	—	—	—	—	—	—	—	—	—	—
Miscellaneous	—	—	—	—	—	—	—	—	—	—
Waste of water	—	—	—	—	—	—	—	—	—	—
Fulaver	—	—	—	—	—	—	—	—	—	—
	GRAND TOTAL	—	162,029	85,69,954	23,047	7,17,075	21,607	5,67,771	2,106	51,723

CONCLUDED.

IN THE PUNJAB DURING THE YEAR 1915-16—CONCLUDED.

LOWER SUTLEJ INUNDATION CANALS.		CHENNAI INUNDATION CANALS.		MUSAFFARABAD INUNDA- TION CANALS.		SHAHPUR (PROVINCIAL) INUNDATION CANALS.		Total area assessed to water-rates.	Total value.
Area assessed to water-rates.	Estimated value.	Area assessed to water-rates.	Estimated value.	Area assessed to water-rates.	Estimated value.	Area assessed to water-rates.	Estimated value.		
22	23	24	25	26	27	28	29		
Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.
106,927	22,45,407	50,557	11,97,067	109,772	31,61,793	2,091	68,673	3,041,214	10,52,65,538
5,531	1,02,046	1,412	36,712	7,877	2,04,498	13	200	30,100	98,01,737
1,003	41,722	12,203	2,08,632	14,010	11,53,299	1,800	1,04,415	400,207	1,88,01,655
10	779	1,413	20,078	20	420	102	2,013	362,798	1,10,07,220
1,511	61,610	"	"	"	"	6	240	21,107	87,35,182
"	"	617	12,010	"	"	"	"	271,617	6,59,800
"	"	"	"	"	"	"	"	30,189	
25,668	4,81,709	6,770	1,29,630	7,733	1,64,077	14,416	411,220		85,40,070
25,649	5,21,219	9,417	68,612	15,114	41,13,745	213	5,538	139,211	34,91,125
72	14,670	101	2,023	101	2,170			4,199	97,416
157	3,426	4	50	3,013	40,210			6,545	63,645
1,617	30,340	"	"	3,049	60,002			5,212	1,83,241
7,412	1,20,401	5,701	27,073	28,771	4,73,541	8	80	476,036	5,58,700
23	4,000	297	5,849	3,409	40,020	374	9,491	23,318	1,46,075
6	166	63	1,020	23	400	34	1,620	7,627	3,80,955
1,724	31,190	2,701	1,07,610	"	"			16,000	2,40,830
604	21,000	188	160	167	3,710			7,769	1,18,665
375	8,735	826	20,590	7,736	1,18,010			4,416	10,07,635
307	8,210	"	"	"	"			47,776	26,60,110
10,437	2,05,710	"	"	"	"			103,085	2,61,815
"	"	"	"	"	"			0,626	3,70,050
"	"	"	"	"	"			10,421	83,970
1,357	35,140	1,770	35,783	2,22	5,590	41	1,025	4,117	26,805
1	16	7	105	135	2,023			1,787	
"	"	"	"	"	"				
9	40	"	"	"	"				
"	"	1	50	322	16,100	7	560	7,607	311,663
12	12	"	"	"	"			1,011	95,550
14,211	2,000	103	5,150	35	1,400			12	450
69	1,870	"	"	"	"			14,211	9,50,100
11	750	"	"	"	"			2,210	62,315
5	75	0	135	"	"			223	7,510
"	"	"	"	"	"			21	1,470
"	"	"	"	"	"			124	4,893
"	"	"	"	"	"			"	7,645
7,031	27,374	6,681	1,06,311	19,603	1,40,033	85	1,020	473,103	1,18,16,494
"	"	"	"	"	"	1	80	5,225	1,63,050
"	"	"	"	"	"	"	"	4,075	131,430
"	"	"	"	"	"	"	"	164	3,780
3,416	1,02,450	2,631	75,030	3,282	89,460	573	17,100	12,673	4,55,110
4	20	"	"	"	"			662	25,800
"	"	"	"	"	"			315	9,450
"	"	"	"	"	"			1	20
9,185	2,22,378	2,678	71,950	874	21,000	3	89	43,182	10,69,076
377	3,25	323	161	4,006	4,006			100,336	22,75,659
1,209	52,474	711	17,825	62	1,570			90,405	50,04,182
6,652	1,21,300	1,314	51,100	6,407	1,62,795	11	271	35,811	8,65,695
"	"	"	"	5	271	75	10	2,064	49,000
1	25	"	"	"	"			643	18,160
"	"	"	"	"	"				
94	7,520	167	11,220	313	15,670	1	80	3,650	3,63,069
"	"	"	"	109	4,000	59	2,920	69,018	83,61,020
"	"	"	"	39	720			1,493	63,045
"	"	"	"	"	"			15,893	15,893
18	801	"	"	"	"			627	42,760
15,655	6,20,000	8,350	8,31,300	8,096	3,03,900	300	8,240	873	63,10,740
"	"	"	"	84	2,350			100,719	59,200
"	"	"	"	"	"			703	20,67,700
1	35	1,510	1,51,000	879	87,900	74	7,100	632	55,135
63	8,720	237	10,520	465	29,250	90	2,100	20,723	14,31,830
377	7,640	"	"	3	00			1,231	30,020
"	"	"	"	"	"				
10	210	"	"	"	"			21,007	13,18,810
5,174	1,65,220	2,147	32,175	"	"			233,000	29,84,705
"	"	11,031	4,20,000	"	11,027	2,99,175		61,021	12,41,415
29	7,375	"	1,200	1,05,730	4,071	5,80,875	78	8,103	1,81,474
"	"	"	"	"	"	"		0,17,101	5,84,205
4,047	80,050	2,070	52,400	2,401	40,821			15,491	16,40,401
2,083	40,215	2	80	16,917	2,41,786			8,339	4,81,724
"	"	"	"	"	"			24,059	1,68,820
"	"	"	"	"	"			48,660	4,81,104
231,613	66,64,012	141,653	35,17,359	3,61,681	70,30,512	17,730	6,81,317	8,411,600	27,60,82,830
"	"	"	"	"	"			22,761	
"	"	"	"	"	"			20,345	
"	"	"	"	"	"			10,401	
"	"	"	"	"	"			3,439	
"	"	"	"	"	"			627	
"	"	"	"	"	"			4,610	
231,613	66,64,032	141,652	35,17,358	3,61,691	70,30,533	17,730	6,81,317	8,457,016	27,60,82,830

IV-E.
COMPARATIVE STATEMENT OF IRRIGATION AND RAINFALL FOR THE YEARS 1915-16 AND 1914-15 IN THE PUNJAB.

Civil District.	Oriental Civil District.			Name.	Area irrigated in acres.			Rainfall, inches.			
	Total area, in acres.	Cultivable area, in acres.			Cultivable area com- mended by Irrigation Works in column 5, in acres.	Present area pro- posed to be normally irrigated by works specified in column 5.	1915-16.	1914-15.			
		Total area, in acres.	Cultivable area, in acres.					Kharif.	Rabi.	Total.	
1	2	3	4		5	6		7	8	9	
Delhi	804,162	673,381	590,931		69,707	37,416	30,972	33,727	11,317	12,557	
Rohilkhand	1,436,516	1,357,708	1,175,162		619,144	260,391	86,523	125,180	6,092	10,718	
Karnal	1,698,473	1,721,682	1,104,817		4,805	215,395	81,191	121,117	20,551	101,807	
Ambala	1,198,530	873,416	717,801								
Hissar	...	3,318,783	3,162,957		617,143	226,737	118,656	250,613	128,199	144,492	
					34,000	9,780	4,218	30,100	6,321	4,711	
					72,973	46,834	17,783	22,906	6,330	16,050	
Jind State	852,013	808,258	719,809	{ Western Jumna Canal Sihlind Canal }	621,821	293,351	125,170	152,761	27,910	122,935	
					210,233	61,000	26,113	31,711	6,817	30,219	
					8,200	3,071	17,103	29,767	6,020	15,117	
Bilawal State	4,120,400	4,036,957	682,293	{ Western Jumna Canal Ghangsar Canals }	227,432	63,671	44,336	61,191	10,497	57,152	
					1,762	460	193	86	421	617	
					34,518	17,369	13	2,156	3,168	3,503	
Patiala State	3,750,4770	3,162,619	2,902,307	{ Western Jumna Canal Sihlind Canal }	30,380	17,769	405	3,911	3,748	2,914	
					173,060	60,301	35,119	29,611	63,719	30,709	
					318,862	109,618	24,110	382,963	587,295	2,2114	
Kallia State	...	121,752	87,502	70,297	Western Jumna Canal	2,151	1,882	721	597	1,618	
					12,303	3,231	1,311	2,269	3,573	1,764	
Indialines	...	893,173	819,033	720,246	Total	15,360	4,013	2,035	3,991	2,057	
Patiala State	2,305,170	2,112,658	2,227,715	2,227,715	Sihlind Canal		1,239,244	434,697	412,721	33,243	
Faridkot State	...	618,311	380,168	371,058			117,573	30,817	17,109	6,519	
Amritsar	903,667	866,113	765,441	765,441	Upper Bari Dabbi Canal		391,137	70,072	31,987	10,015	
Gurdaspur	1,160,207	913,755	1,297,635	1,297,635			62,410	47,054	20,528	4,002	

Madore	...	1,716,771	1,619,037	1,170,169	Upper Bari Doab Canal	865,216	281,689	412,021	69,610	331,661	450,612	785,802	-87	20 10	
					Upper Chennab Canal	291,805	30,900	28,155	1,150	29,553	50,853	80,146	655	20 70	
					Upper Chennab Canal	93,956	3,575	500	1,150	381	394	705	360	21 82	
					Lower Bari Doab Canal	1,475	4,899	1,058	1,558	3,056	1,450	9,047	360	21 82	
					Total	1,167,369	659,460	803,917	444,151	749,071	805,891	638,369	869,260	...	...
Montgomery	...	2,717,733	2,237,211	737,716	Upper Sutlej Irrigation Canals	617,911	235,228	113,887	110,104	223,991	165,193	201,050	359,538	150	13 03
					Ravi Irrigation Canals	...	...	...	...	23	23	47	793	...	...
					Hajjiwah Canal	...	...	1	1	24	24	149,716	195	...	...
					Lower Bari Doab Canal	811,033	610,139	92,370	134,046	296,376	80,353	69,832	149,716	195	18 37
					Total	1,432,021	751,367	206,259	214,183	450,391	235,594	274,189	610,033	...	...
Multan	...	3,311,214	9,401,956	1,112,673	Sindhi Canal	314,159	169,010	117,999	162,131	270,150	139,477	191,982	331,659	272	15 96
					Chennab Irrigation Canals	360,313	200,070	84,107	96,375	170,195	103,977	115,421	216,368	073	10 10
					Lower Sutlej Irrigation Canals	9,5152	230,970	100,870	116,213	256,161	114,816	173,953	318,783	079	9 18
					Hajjiwah Ca. ral	...	...	12,161	11,921	27,385	18,133	36,791	55,224	...	...
					Lower Lait Doab Canal	135,323	527	517	91,136	32,726	53,982	21,452	36,442	091	11 49
					Total	2,019,932	827,517	315,576	422,169	778,043	431,369	630,232	961,511	...	...
Muzaffargarh	..	3,567,202	3,069,513	747,773	Muzaffargarh Irrigation Canals	67,149	35,0	137,837	219,371	377,311	151,630	226,829	378,510	073	0 49
Dera Ghazi Khan	..	3,475,185	2,304,192	1,137,210	Indus Irrigation Canal	122,913	361,760	1,19,124	97,617	345,611	156,212	67,650	223,892	192	10 13
Gujranwala	..	2,102,021	2,256,675	1,420,772	Lower Chenab Canal	...	707,050	328,228	155,281	157,171	512,134	160,578	310,161	48,183	616
					Upper Chenab Canal	1,921,110	143,782	122,624	134,628	202,356	90,505	75,502	172,367	410	20 73
					Total	1,927,480	722,310	277,801	456,759	77,149	266,393	305,423	661,806	...	...
Layalpur	..	2,103,396	1,881,320	1,412,739	Lower Chenab Canal	1,493,701	369,481	208,150	1,070,074	1,197,534	445,006	1,081,295	1,626,850	223	18 83
					Upper Chenab Canal	95,293	61,111	8,20	19,045	27,165	5,116	8,747	13,863	16	3 00
					Total	1,583,994	1,030,552	416,570	1,098,119	1,314,689	450,121	1,09,012	1,640,163	...	...
Jhang	..	2,171,663	1,904,350	821,060	Lower Chenab Canal	1,13,049	198,519	88,129	195,652	284,121	98,426	198,018	296,471	328	13 39
					Wularfengrugh Irrigation Canal	...	...	22,22	12	41,552	42	85	125	...	...
					Lower Jhelum Canal	323,638	154,76	37,032	90,693	127,693	10,846	80,292	127,751	231	10 33
					Total	756,687	353,425	125,481	—	411,777	144,020	281,333	424,363	...	...
Shahpur	..	3,072,642	2,803,316	1,275,303	Lower Jhelum Canal	620,180	6,642	175,687	517,359	692,908	104,358	186,338	680,836	432	21 21
					Sial (par) (Imperial) Canal	62,654	43,003	9,420	17,310	20,750	27,451	43,607	533	24 43	
					Sialpur (Provincial) Canals	53,255	24,170	4,327	14,357	18,804	10,846	30,801	353	24 43	
					Total	936,889	397,712	189,625	549,025	739,651	240,142	521,312	754,754	...	...
Gujrat	..	1,454,050	1,167,208	880,372	Lower Jhelum Canal	18,747	12,501	1,158	9,430	13,586	4,476	8,862	13,048	...	...
Sialkot	..	1,565,678	1,131,755	903,917	Upper Chocal Canal	171,647	31,138	27,814	6,047	33,891	18,867	6,000	24,887	11,26	33 85
					Grand Total	16,018,311	7,631,357	3,219,183	6,635,528	8,848,811	3,850,888	6,312,183	8,863,041	...	...

(6) Columns 6 and 7 exclude the " unter-the-river command " and " river command " areas irrigated on the Native State Branches of the Sutlej Canal.

(7) Includes 14,018 acres irrigated by the Native State Branches of the Sutlej Canal.

(8) Irrigated by the Sutlej Canal, on the Punjab State.

(9) Irrigated by the Sutlej Canal, on the Sialkot State.

(10) Irrigated by the Sutlej Canal, on the Sialkot State.

(11) Irrigated by the Sutlej Canal, on the Sialkot State.

(12) Irrigated by the Sutlej Canal, on the Sialkot State.

(13) Irrigated by the Sutlej Canal, on the Sialkot State.

(14) Irrigated by the Sutlej Canal, on the Sialkot State.

(15) Irrigated by the Sutlej Canal, on the Sialkot State.

(16) Irrigated by the Sutlej Canal, on the Sialkot State.

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I.I.F.

STATEMENT SHOWING OCCUPIER'S RATE AND OWNER'S RATE IN FORCE ON THE CANALS IN THE PUNJAB DURING THE YEAR 1915-16.

Authority.	Class.	Nature of crops.	RATE PER ACRE.		Per
			Flow.	Lift.	
Irrigation Branch Notification No. 0250 R. I., dated 24th August 1910.		WESTERN JUMNA CANAL INCLUDING SIRSA BRANCH. OCCUPIER'S RATE.	Rs. A. P.	Rs. A. F.	
I Sugarcane					
			9 0 0	6 0 0	Crop.
II Rice and water-nuts					
			6 8 0	4 0 0	Do.
III Tobacco, poppy, vegetables, gardens and orchards, drugs and spices					
			5 8 0	8 8 0	Gardens and orchards per half year; the rest per crop.
IV Cotton, indigo, and all rabi crops, except gram and masur, maize					
			4 0 0	2 8 0	Crop.
V All other kharif crops, gram and masur ...					
			2 8 0	1 8 0	Do.
Irrigation Branch Notification No. 620 R. I., dated 12th May 1913.		VI Single watering before ploughing not followed by a canal-irrigated crop in the same or next harvest.	1 0 0	0 8 0	Watering.
Crops grown on the moisture of a previous crop					
LOWER CHAUTANG NALA CANAL.					
 OCCUPIER'S RATE.					
Irrigation Branch Notification No 1631 I dated 27th April 1910.		I Sugarcane, rice, water-nuts	4 2 0	2 12 0	Crop.
IV Cotton, indigo, maize					
			2 8 0	1 10 8	Do.
V Other kharif crops					
			1 13 0	1 2 8	Do.
VII Special rate.—Single watering before ploughing for rabi followed by a crop ...					
			1 2 0	0 12 0	Do.
SIRHIND CANAL.					
 ZONE I.					
<i>All lands irrigated by the British Branches of the Sirhind Canal with the exception of those situated in the Fazilka Tahsil of the Ferozepore District.</i>					
Irrigation Branch Notification No. 273 R. I., dated 21st December 1904.		I Sugarcane	12 0 0	6 0 0	Crop.
II Rice, orchards, gardens, poppy, indigo, dyes, drugs and spics, water-nuts, maize, wheat, vegetables, except turnips					
			5 4 0	3 10 0	Orchards and gardens per half-year; the rest per crop.
III Cotton, chillies, melons, tobacco, fibres, barley, oil-seeds, berries, sejji, all non-fodder crops in kharif and rabi not specified					
			4 0 0	2 6 0	Crop.
IV Bajra, jowar, ecarai, moth, mung, mash, guar, chana, maun, gram, turnips, peas, and all kharif and rabi fodder crops not specified. ...					
			3 4 0	1 10 0	Do.
Irrigation Branch Notification No. 624 R. I., dated 12th May 1913.		V Single watering before ploughing not followed by a canal-irrigated crop in the same or next harvest ...	1 8 0	0 12 0	Each watering.
Also crops grown on the "soil" of a previous crop					
					Crop.
VI Special rates which may be made applicable to channels selected by the Local Government:—A single watering before ploughing followed by a rabi crop					
			2 4 0	1 2 0	

STATEMENT SHOWING OCCUPIER'S RATE AND OWNER'S RATE IN FORCE ON THE CANALS IN THE PUNJAB DURING THE YEAR 1915-16—CONTINUED.

Authority.	Class.	Nature of crops.	RATE PER ACRE.		Per
			Flow.	Lift.	
		SIRHIND CANAL—CONCLUDED. ZONE II. <i>All lands irrigated by the British Branches of the Sirhind Canal in the Fazilka Tahsil of the Ferozepore District.</i>	Rs. A. P.	Rs. A. P.	
<i>Irrigation Branch Notification No. 273 R. I., dated 21st December 1904.</i>					
	I	Sugarcane	10 0 0	5 0 0	Crop.
	II	Rice, orchards, gardens, poppy, indigo, dye, drugs and spices, water-nuts, maize, wheat, vegetables (except turnips)	5 0 0	2 8 0	Orchards and gardens per half year; the rest per crop.
	III	Cotton, chillies, melons, tobacco, fibres, barley, oil-seeds, henna, sonji, all non-fodder crops in kharif and rabi not specified	8 12 0	1 14 0	Crop.
	IV	Jaffra, jowar, chari, moth, mung, mash, guar, chana, masur, gram, turnips, peas and all kharif and rabi fodder crops not specified.	3 0 0	1 8 0	Do.
<i>Irrigation Branch Notification No. 621 R. I., dated 12th May 1913.</i>					
	V	Single watering before ploughing not followed by a canal-irrigated crop in the same or next harvest	1 8 0	0 12 0	Each watering.
		Also crops grown on the "wadi" of a previous crop			Crop.
<i>All lands irrigated by other than the British Branches of the Sirhind Canal.</i>					
<i>Irrigation Branch Notification No. 6610 I., dated 27th November 1893.</i>					
	I	Sugarcane, rice, water-nuts	7 8 0	5 0 0	Crop.
	II	Gardens, orchards, tobacco, poppy, vegetables, indigo, maize	4 8 0	3 0 0	Do.
	III	Cotton, fibres, all dyes (except indigo), all rabi crops (except gram and masur)	3 12 0	2 8 0	Do.
	IV	All kharif crops not specified above and rabi crops of gram and masur	2 10 0	1 12 0	Do.
<i>Irrigation Branch Notification No. 624 R. I., dated 12th May 1913.</i>					
	V	Single watering before ploughing not followed by a canal-irrigated crop in the same or next harvest	0 12 0	0 8 0	Each watering.
	VI	Special rate which may be made applicable to channels selected by the Local Government.			
		A single watering before ploughing for rabi followed by a rabi crop	1 8 0	1 0 0	Crop.

STATEMENT SHOWING OCCUPIER'S RATE AND OWNER'S RATE IN FORCE ON THE
CANALS IN THE PUNJAB DURING THE YEAR 1915-16—CONTINUED.

Authority.	Class.	Nature of crops.	RATE PER ACRE.		Per			
			Flow.	Lift.				
UPPER BARI DOAB CANAL.								
OCCUPIER'S RATE.								
Irrigation Branch Notifica-	I	Sugarcane and water-nuts	7 1 0	2 8 6	Crop.			
tion No. 2621 R. I., dated								
10th June 1891.								
	II	Rice	6 0 10	3 0 5	Do.			
	III	Orchards and gardens, tobacco, poppy and other drugs, vegetables, melons	4 8 8	2 4 4	Orchards and gardens per half-year; the rest per crop.			
	IV	All dye, fibres and oilseeds; all rabi crops except gram and masur	3 12 6	1 14 3	Crop.			
	V	All kharif crops not specified above; rabi crops of gram and masur; all fodder crops ...	2 12 5	1 6 2	Do.			
	VI	Special rates, which may be made applicable to channels selected by the Local Government: a single watering before ploughing for rabi followed by a crop	2 0 4	1 0 2	Do.			
Irrigation Branch Notifica-	VII	A single watering before ploughing not followed by a canal-irrigated crop in the same or next harvest ...	1 0 2	0 8 1	Each watering.			
tion No. 628 R. I., dated		Crops grown on the "wadhi" of a previous crop			Crop.			
12th May 1913.								
Irrigation Branch Notifica-	VIII	<i>Village plantations on areas to which the provisions of Act III of 1893 have been extended and District Board plantations within the Chunar Colony.</i>						
tion No. 349 R. I., dated		For any number of waterings in the kharif season	1 3 4	0 9 8	Half-year.			
26th March 1907; No. 698 R. I., dated 11th December 1907; No. 030 R. I., dated 2nd July 1908.		For one watering in rabi season ...	1 3 4	0 9 8	Do.			
		For two or more waterings in rabi season ...	2 11 7	1 6 0	Do.			
LOWER BARI DOAB CANAL.								
OCCUPIER'S RATE.								
Irrigation Branch Notifica-	I	Cane and water-nuts	9 0 0	4 8 0	Crop.			
tion No. 547 R. I., dated								
23rd April 1913.	II	Rice	7 8 0	3 12 0	Do.			
	III	Orchards, gardens, tobacco, poppy, indigo, drugs, vegetables, melons and wheat ...	5 0 0	2 8 0	Orchards and gardens per half year; rest per crop.			
	IV	Cotton, fibres, dyes (other than indigo) oilseeds and all rabi crops, except wheat, gram, masur, senji, mains and turnips ...	4 0 0	2 0 0	Crop.			
	V	All kharif crops not otherwise specified ...	3 0 0	1 8 0	Do.			
	VI	(a) Gram, masur, senji, turnips and mains ...						
		(b) Crops grown on the "wadhi" of a previous crop.	2 4 0	1 2 0	(a) Crop (b) and (c) acre.			
		(c) Single watering before ploughing for rabi followed by a rabi crop to be applicable only to channels selected by the Local Government.						
	VII	Grass, village and District Board plantations—						
		For any number of waterings in kharif season.	1 4 0	0 10 0	Half-year.			
		For one watering in rabi season ...	1 4 0	0 10 0	Do.			
		For two or more waterings in rabi season ...	2 8 0	1 4 0	Do.			
	VIII	(a) Single watering before ploughing not followed by a canal-irrigated crop in the same or next harvest.	0 8 0	0 4 0	Acre.			
		(b) Hemp (m) and indigo which has been ploughed in as green manure before the 15th September.						

STATEMENT SHOWING OCCUPIER'S RATE AND OWNER'S RATE IN FORCE ON THE CANALS IN THE PUNJAB DURING THE YEAR 1915-16—CONTINUED.

Authority,	Class.	Nature of crops.	RATE PER ACRE.		Per
			Flow.	Lift.	
			Rs. A. P.	Rs. A. P.	
UPPER CHENAB CANAL.					
OCCUPIER'S RATE.					
Irrigation Branch Notification No 0223 R. I., dated 8th August 1912.	I	Cane and water-nuts	9 0 0	4 8 0	Crop.
	II	Rice	7 8 0	8 12 0	Do.
	III	Orchards, gardens, tobacco, poppy, indigo, drugs, vegetable, melons and wheat	6 0 0	2 8 0	Orchards and gardens per half year; rest per crop.
	IV	Cotton, fibres, dyes (other than indigo), oilseed and all rabi crops, except wheat, gram, masur, senji, maize and turnips	4 0 0	2 0 0	Crop.
	V	All kharif crops not otherwise specified ..	3 0 0	1 8 0	Do.
	VI	(a) Gram, masur, senji, turnips and maize ..			
		(b) Crops grown on the "wadi" of a previous crop.	2 4 0	1 2 0	(a) Crop (b) and (c) acre.
		(c) Single watering before ploughing for rabi followed by a rabi crop, to be applicable only to channels selected by the Local Government.			
VII	Grass, village and District Board plantations—				
		For any number of waterings in the kharif season...	1 4 0	0 10 0	Half-year.
		For one watering in rabi season ...	1 4 0	0 10 0	Do.
		For two or more waterings in rabi season ...	2 8 0	1 4 0	Do.
Irrigation Branch Notification No. 55 R. I., dated 13th January 1913.	VIII	(a) Single watering before ploughing not followed by a canal-irrigated crop in the same or the next harvest.			
		(b) Hemp (son) and indigo which has been ploughed as green manure before the 15th September.	0 8 0	0 4 0	Acre.
LOWER CHENAB CANAL.					
OCCUPIER'S RATE.					
<i>Applicable to—</i>					
(a) all estates in the Gujranwala District which were established before the 1st January 1892;					
(b) all estates in the Jhang District which were established before 1st January 1892, except those which were transferred from the Montgomery to the Jhang District by Revenue and Agriculture Notification No. 370 of 4th May 1899; and such proprietary wells as are now or may hereafter be included within the boundaries of the Colony mauzas;					
(c) all estates in the Gugera and Montgomery tahsils of the Montgomery District which were established before 1st January 1891; and					
(d) all estates in the Multan and Lahore Districts which were established before 1st April 1902.					

STATEMENT SHOWING OCCUPIER'S RATE AND OWNER'S RATE IN FORCE ON THE CANALS IN THE PUNJAB DURING THE YEAR 1915-16—CONTINUED.

Authority.	Class.	Nature of crops..	RATE PER ACRE.		Per
			Flow.	Lift.	
		LOWER CHENAB CANAL—CONTINUED.	Rs. A. P.	Rs. A. P.	
OCCUPIER'S RATE—continued.					
Irrigation Branch Notification No. 017 R. I., dated 13th June 1908.	I	Sugarcane, water-nuts	8 0 0	4 4 0	Crop.
	II	Rice	6 12 0	3 10 0	Do.
	III	Orchards, gardens, tobacco, poppy, indigo, drugs, vegetables, melons	5 8 0	3 0 0	Orchards and gardens per half-year; the rest per crop.
	IV	Cotton, fibres, dyes (other than indigo), oilseeds, maize and all rabi crops (except gram and masur)	4 4 0	2 6 0	Crop.
	V	All kharif crops not otherwise specified, and gram and masur	3 0 0	1 12 0	Do.
Irrigation Branch Notification No. 636 R. I., dated 12th May 1913.	VI	Single watering before ploughing not followed by a canal-irrigated crop in the same or next harvest	1 12 0	1 2 0	Each watering.
		Also crops grown on the "wadī" of a previous crop			Crop.
	VII	Single watering before ploughing for rabi followed by a rabi crop, to be applicable only to channels selected by the Local Government ...	3 4 0	1 6 0	Acre.
Irrigation Branch Notification No. 0141 R. I., dated 12th October 1908.	VIII	Grass—			
		For any number of waterings in the kharif season	1 4 0	0 10 0	Half-year.
		For one watering in the rabi season	1 4 0	0 10 0	Do.
		For two or more waterings in the rabi season	2 8 0	1 4 0	Do.
<i>Applicable to estates other than those referred to in Notification No. 017 R. I., dated 13th June 1908, above.</i>					
Irrigation Branch Notification No. 321 R. I., dated 6th January 1892.	I	Sugarcane	7 8 0	3 12 0	Crop.
	II	Rice	6 4 0	3 2 0	Do.
	III	Orchards, gardens, tobacco, indigo, vegetables, poppy, dhania, zira, saunf, melons ...	5 0 0	2 8 0	Orchards and gardens per half-year; the rest per crop.
	IV	Cotton, fibres, dyes (other than indigo), oilseeds, maize and all rabi crops (except gram and masur)	8 12 0	1 14 0	Crop.
	V	All kharif crops not otherwise specified, and gram and masur	2 8 0	1 4 0	Do.
Irrigation Branch Notification No. 636 R. I., dated 12th May 1913.	VI	Single watering before ploughing not followed by a canal-irrigated crop in the same or next harvest	1 4 0	0 10 0	Each watering.
	VII	Also crops grown on the "wadī" of a previous crop			Crop.
Irrigation Branch Notifications No. 0141 R. I., dated 12th October 1908, and No. 313 R. I., dated 19th December 1905, and No. 701 R. I., dated 11th December 1907.	VIII	Grass, village plantations in Colony villages, and District Board plantations in the Colony—			
		For any number of waterings in the kharif season	1 4 0	0 10 0	Half-year.
		For one watering in the rabi season	1 4 0	0 10 0	Do.
		For two or more waterings in the rabi season	2 8 0	1 4 0	Do.

STATEMENT SHOWING OCCUPIER'S RATE AND OWNER'S RATE IN FORCE ON THE
CANALS IN THE PUNJAB DURING THE YEAR 1915-16—CONTINUED.

Authority.	Class.	Nature of crops.	RATE PER ACRE.		Per
			Flow.	Lift.	
		LOWER CHENAB CANAL—CONTINUED. OCCUPIER'S RATE—concluded. <i>Applicable to the following estates selected by the Local Government:—</i>	Rs. A. P.		
			Rs. A. P.		
Irrigation Branch Notification No. 0275 R. I., dated 26th August 1912	Division.	District.	Settlement assessment circle.	No. of Chals and Branch.	
	Upper Gugera.	Gujranwala	Gugera Branch L.	637, 638 and 639, Gugera Branch	
	Lower Gugera.	Lyallpur	Ditto ..	71 and part of 75 and 104, Gugera Branch	
	Lyallpur	Lyallpur.	Jhang Branch I	10 th and half of 23 Jhang Branch	
		Jhang ..	Ditto ..	120, 130, 137, 161, 143, 147, 173, 183, 184 and 187, Jhang Branch	
		Lyallpur.	Jhang Branch II.	328, 341, 345, 420 and 426, Jhang Branch.	
	Jhang	Jhang ..	Ditto ..	172, 174, 175, 176, 177, 178, 205, 206, 212, 213, 217, 220, 221, 244, 245, 443, 447, 201, 202, 203 and 210, Jhang Branch.	
		Lyallpur ..	Jhang Branch III.	307, 309, 308, 401, 402, 406, 407, 410, 411, 412, 418 and 420, Jhang Branch.	
		Jhang ..	Ditto	449, 449, 450, 417, 419, 449, 426, 431, and 433, Jhang Branch.	
	Lower Gugera.	Lyallpur ..	Gugera Branch I.	118, 207 and 249, Gugera Branch.	
	Jhang ..	Ditto ..	Jhang Branch III.	421, 421, 314, 347, 373, 429 and 430, Jhang Branch.	
	Ditto ..	Jhang ..	Jhang Branch II.	120, Jhang Branch.	
	Lower Gugera.	Lyallpur	Gugera Branch III.	214, 226, 227, 228, 229, 210 and 229, Gugera Branch.	
	Burals ..	Ditto ..	Ditto	307, 701, 702, 603, 604, 605, 613, 615 and 616, Gugera Branch.	
	Khanhi ..	Gujranwala	..	11, 122 nd and 380, Rakh Branch.	
	Upper Gugera.	Ditto ..	..	12, 13, 21, 20, 31, 34 and 40, Rakh Branch.	
	Ditto ..	Lyallpur ..	..	67, 61, 107 and 109, Rakh Branch.	
	Lyallpur	Ditto ..	..	105, 211, 217, 225, 230 and 231, Rakh Branch.	
	Jhang ..	Jhang ..	..	405, 475, 476, 479, 459, 481, 484, 485, 490, 493, 498, 500, 503, 504 and 506, Jhang Branch.	
	Burals ..	Lyallpur ..	..	417, 558, 561, 584, 587, 619, 616, 610, 621, 622 and 623, Burals Branch.	
	Lower Gugera.	Ditto ..	..	531, Gugera Branch, Lower.	
	Upper Gugera.	Ditto ..	..	530, Gugera Branch, Upper	
Irrigation Branch Notification No. 112 R. I., dated 30th January 1912	IV	Cotton, fibres, dyes, other than indigo, oilseeds, maize, and all rabi crops except gram and maseur.	..	3 0 0	1 12 0 Crop.
	V	All kharif crops not otherwise specified and gram and maseur.	..	2 0 0	1 4 0 Do.

STATEMENT SHOWING OCCUPIER'S RATE AND OWNER'S RATE IN FORCE ON THE
CANALS IN THE PUNJAB DURING THE YEAR 1915-16—CONTINUED.

Authority.	Class.	Nature of crops.	RATE PER ACRE.		Per
			Flow.	Lift.	
			Rs. A. P.	Rs. A. P.	
LOWER CHENAB CANAL—CONCLUDED.					
OWNER'S RATE.					
Irrigation Branch Notification No. 120 R. I., dated 13th June 1903.	II	<i>Rule for the imposition of an Owner's Rate upon the owners of lands irrigated from the Lower Chenab Canal.</i>			
		<i>Rate.</i>			
		The Owner's Rate shall be at the rate of one rupee per acre per crop irrigated, provided that no Owner's Rate shall be levied on any of the estates named below—			
		(a) Estates in the Gujranwala District which were established before the 1st January 1892,			
		(b) Estates in the Jhang District which were established before the 1st January 1892, except those which were transferred from the Montgomery to the Jhang District by Revenue and Agriculture Notification No. 270 of 4th May 1899; and such proprietary wells as are now or may hereafter be included within the boundaries of the Colony muzas.			
		(c) Estates in the Ghang and Montgomery tahsils of the Montgomery District which were established before the 1st January 1894.			
		(d) All estates in the Multan and Lahore Districts which were established before the 1st April 1902.			
LOWER JHELUM CANAL.					
OCCUPIER'S RATE.					
Irrigation Branch Notification No. 07 R. I., dated 2nd May 1902.	I	Sugarcane, water-nuts	10 0 0	5 0 0	Crop.
	II	Rice	6 4 0	3 2 0	Do.
	III	Orchards, gardens, tobacco, indigo, vegetables, drugs, poppy and melons	5 0 0	2 8 0	Orchards and gardens per half-year; the rest per crop.
	IV	Cotton, fibres, dyes (other than indigo), oilseeds, maize and all rabi crops except gram and masur	3 12 0	1 14 0	Crop.
	V	All other kharif crops, gram and masur, and all crops grown for fodder	2 8 0	1 4 0	Do.
Irrigation Branch Notification No. 032 R. I., dated 12th May 1918.	VI	Single watering before ploughing, not followed by a canal-irrigated crop in the same or next harvest	1 4 0	0 10 0	Each watering.
		Crops grown on the "teadh" or moisture of a previous crop.			Crop.
	VII	Single watering, before ploughing for rabi followed by a rabi crop, to be applicable only to channels selected by the Local Government	2 8 0	1 4 0	Crop.
Irrigation Branch Notifications No. 0121 R. I., dated 21st September 1903, No. 310 R. I., dated 19th December 1905, and No. 605 R. I., dated 11th December 1907.	VIII	Gras, village plantations in Colony villages and District Board plantations in the Colony— For any number of waterings in the kharif season	1 4 0	0 10 0	Half-year.
		For one watering in the rabi season	1 4 0	0 10 0	Ditto.
		For two or more waterings in the rabi season	2 8 0	1 4 0	Ditto.

STATEMENT SHOWING OCCUPIER'S RATE AND OWNER'S RATE IN FORCE ON THE
CANALS IN THE PUNJAB DURING THE YEAR 1915-16—CONTINUED.

Authority.	Class.	Nature of crops:	RATE PER ACRE.		Per
			Flow.	Lift.	
			Rs. A. P.	Rs. A. P.	
LOWER JHELUM CANAL—CONCLUDED.					
Occupier's Rate—concluded.					
Applicable to—					
(1) All villages or portions of villages in the Bhera Tahsil irrigated from the Khadir Feeder or Khadir Distributary.					
(2) All villages in the Shahpur Tahsil, except Sher Muhammadwala and Wagonal and except all villages or portions of villages irrigated from the Sahiwal Feeder including the Sahiwal Distributary and Gondal Distributary.					
(3) The following villages in the Sargodha Tahsil:—					
Northern Branch Chaks—					
Nos. 89, 93, 94, 95, 103, 104, 105, 106, 110, 112, 115 to 174 inclusive.					
Southern Branch Chaks—					
Nos. 60, 61, 63, 181, 183, 184, 185, 187 to 141 inclusive and Chak Jodd on the Khadir Distributary.					
Irrigation Branch Notifications No. 409 R.I., dated 20th March 1912, and No. 438 R. I., dated 3rd April 1912,	I	Sugarcane and water-nuts	7 8 0	0 12 0	Crop.
	II	Rice	4 0 0	2 0 0	Do.
	III	Orchards, gardens, indigo, vegetables, drugs and melons	5 0 0	2 8 0	Orchards and gardens per half-year; the rest per crop.
	IV	Wheat	3 4 0	1 10 0	Crop.
	V	Cotton and oilseeds	3 0 0	1 8 0	Do.
	VI	Fibres (other than cotton), dyes (other than indigo), maize and all rabi crops other than wheat, gram and masur	2 8 0	1 4 0	Do.
	VII	All other kharif crops, gram, maize and all crops grown for fodder (including turnips)	3 0 0	1 0 0	Do.
	VIII	Single watering before ploughing not followed by a canal-irrigated crop in the same or next harvest	1 4 0	0 10 0	Each watering.
		Crops grown on "wadi" or moisture of a previous crop	1 4 0	0 10 0	Crop.
	IX	Single watering before ploughing for rabi followed by a rabi crop, to be applicable only to channels selected by the Local Government	2 8 0	1 4 0	Crop.
Irrigation Branch Notification No. 632 R. I., dated 12th May 1912,	X	Grass, village plantations in Colony villages and District Board plantations in the colony—			
		For any number of waterings in the kharif season	1 4 0	0 10 0	Half-year.
		For one watering in the rabi season	1 4 0	0 10 0	Do.
		For two or more waterings in the rabi season	2 8 0	1 4 0	Do.

STATEMENT SHOWING OCCUPIER'S RATE AND OWNER'S RATE IN FORCE ON THE
CANALS IN THE PUNJAB DURING THE YEAR 1915-16—CONTINUED.

Authority.	Class.	Nature of crops.	RATE PER ACRE.		Per			
			Flow.	Lift.				
LOWER SOHAG AND PARA CANALS.								
OCCUPIER'S RATE.								
Irrigation Branch Notification No. 423 I., dated 7th March 1898.	I	Rice, gardens and pepper	3 4 0	1 10 0	Acre.			
	II	Cotton, sugarcane, melons, til and hemp ...	2 4 0	1 2 0	Do.			
	III	All other kharif crops	1 4 0	0 10 0	Do.			
	IV	All matured rabi crops, plantations and vegetables.	1 0 0	0 8 0	Do.			
	V	Failed rabi crops and grasses	0 8 0	0 4 0	Do.			
UPPER SUTLEJ INUNDATION CANALS.								
MONTGOMERY DISTRICT.								
Occupier's Rate.								
Irrigation Branch Notification No. 422 I., dated 7th March 1898.	I	Rice, gardens and pepper	3 4 0	1 10 0	Acre.			
	II	Cotton, sugarcane, melons, til and hemp ...	2 4 0	1 2 0	Do.			
	III	All other kharif crops	1 4 0	0 10 0	Do.			
	IV	All matured rabi crops, plantations and vegetables.	1 0 0	0 8 0	Do.			
	V	Failed rabi crops and grasses	0 8 0	0 4 0	Do.			
LAHORE DISTRICT.								
Occupier's Rate.								
Irrigation Branch Notification No. 1505 I., dated 18th April 1900.	I	Rice, gardens and pepper	3 4 0	1 10 0	Acre.			
	II	Cotton, sugarcane, melons, til and hemp ...	2 4 0	1 2 0	Do.			
	III	All other kharif crops	1 4 0	0 10 0	Do.			
	IV	All matured rabi crops, plantations and vegetables.	1 0 0	0 8 0	Do.			
	V	Failed rabi crops and grasses	0 8 0	0 4 0	Do.			
SIDHNAI CANALS.								
WATER-RATES.								
Kabirwala and Multan talukas.								
Punjab Civil (Revenue) Department letter No. 203, dated 11th December 1899.			Rate per acre.					
	I	Rice, fruits and vegetables, pepper, cotton, til, sugarcane, wheat and tobacco	Rs. A. P.					
	II	Other kharif crops	3 5 0					
	III	Other rabi crops	2 6 0					
			2 2 0					
Note.—"Lift" rates to be half the "flow" rates.								
LOWER SUTLEJ INUNDATION CANALS.								
OCCUPIER'S RATE.								
Mailsi Canal and Branches; Muhammadwala-Sardarwala and Branches; Bahawalwala-Lodhran and Branches.								
Irrigation Branch Notification No. 53 R. I., dated 14th February 1903.	I	Rice, gardens and pepper	3 4 0	1 11 0	Acre of matured crop.			
	II	Cotton, sugarcane and til	1 12 0	1 5 0	Ditto.			
	III	Other kharif crops	1 8 0	1 2 0	Ditto.			
	IV	Rabi crops	0 14 0	0 10 0	Ditto.			
Note.—Irrigation on grass lands may be assessed at half rabi rates at the discretion of the Deputy Commissioner.								

STATEMENT SHOWING OCCUPIER'S RATE AND OWNER'S RATE IN FORCE ON THE
CANALS IN THE PUNJAB DURING THE YEAR 1915-16—CONTINUED.

Authority.	Class.	Nature of crop.	RATE PER ACRE.		Per			
			Flow.	Lift.				
CHENAB INUNDATION CANALS								
OCCUPIER'S RATE.								
<i>Gajjuhalla, Sikandarabad-Sikandarnah and Bilochanrah Canals.</i>								
Irrigation Branch Notification No. 2136 I., dated 2th November 1899.	I	Rice, gardens and pepper	2 4 0	1 11 0	Acre of matured crop.			
	II	Cotton, sugarcane and til	1 12 0	1 5 0	Ditto.			
	III	Other kharif crops	1 8 0	1 2 0	Ditto.			
	IV	Rabi crops	0 14 0	0 10 0	Ditto			
Note.—Irrigation on grass lands may be assessed at half rabi rates at the discretion of the Deputy Commissioner.								
<i>Mattithal, Daurana Langana and Wali Muhammad Canals.</i>								
Irrigation Branch Notification No. 01622 I., dated 26th September 1900.	I	Rice, gardens and pepper	2 4 0	1 11 0	Acre of matured crop.			
	II	Cotton, sugarcane and til	1 12 0	1 5 0	Ditto.			
	III	Other kharif crops	1 8 0	1 2 0	Ditto.			
	IV	Rabi crops	0 14 0	0 10 0	Ditto.			
Note.—Irrigation on grass lands may be assessed at half rabi rates at the discretion of the Deputy Commissioner.								
HAIJWAH CANAL.								
Irrigation Branch Notification No. 260 R. I., dated 15th November 1905.	In exercise of the power conferred by section 29 (1) of the Punjab Minor Canals Act, 1905 (Punjab Act III of 1905), His Honour the Lieutenant-Governor is pleased to direct that for all irrigation from the Hajiwah Canal the following rates shall be levied <i>per acre</i> actually matured, namely :—							
WATER-RATES.								
	I	Rice, gardens and pepper	2 4 0	1 11 0				
	II	Cotton, sugarcane and til	1 12 0	1 5 0				
	III	Other kharif crops	1 8 0	1 2 0				
	IV	Rabi crops	0 14 0	0 10 0				
Provided that on all irrigation, within the original grant of land made in the year 1880 to the late Ghulam Kadir Khan, of lands, the proprietary right in which is or may hereafter become vested—								
(a) in the sons of lineal descendants of the said Ghulam Kadir Khan; or								
(b) in Mian Muhammad Khan or Hafiz Muhammad Afzal Khan, the nephews of the said Ghulam Kadir Khan or their lineal descendants;								
the rate <i>per acre</i> actually matured whether in the kharif or rabi, shall be limited to the following rates, namely—								
Rs. A. P.								
Flow 0 12 0 per acre.								
Lift 0 9 0 "								

STATEMENT SHOWING OCCUPIERS' RATE AND OWNER'S RATE IN FORCE ON THE CANALS IN THE PUNJAB DURING THE YEAR 1915-16—CONTINUED.

Authority.	Class.	Nature of crops.	RATE PER ACRE.		Per
			Flow.	Lift.	
		HAJIWAH CANAL—CONCLUDED. WATER RATES—concluded.	R. A. P.	Rs. A. P.	
Irrigation Branch Notification No. 269 R. I., dated 15th November 1905.	...	In exercise of the power conferred by section 29 (1) of the Punjab Minor Canals Act (Punjab Act III of 1905), the Lieutenant-Governor is pleased to direct that the following rates shall be levied on the Hajiwah Canal, in the Multan and Montgomery districts, for the supply of water for purposes other than irrigation, viz.:—			
		Purpose for which supplied.	Rs. A. P.		
		Brick-making and pisé wall building ...	0 3 0		100 cubic feet.
		Laying concrete or brick or stone masonry ...	0 2 0		Ditto.
		Metalling roads	10 0 0		Mile.
		Water supplied in bulk ...	1 0 0		2,500 cubic feet.
Irrigation Branch Notification No. 0235 R. I., dated 10th September 1906.	...	Watering road-side or avenue trees ...	2 8 0		Canal mile of 5,000 feet for kharif crop.
			5 0 0		Canal mile of 5,000 feet for rabi crop.
Irrigation Branch Notification No. 106 R. I., dated 30th January 1912.	...	Provided.—Except within the limits of Civil Stations, Cantonments and Municipalities no charge shall be made for water used for the manufacture of bricks not subsequently burnt in a kiln or for pisé wall building, if taken from a water-course or tank lawfully supplied from a canal, and if such bricks or walls are for buildings owned by cultivators having a share in the water-course, and no rate shall be levied for water supplied in bulk, under proper authority, to village tanks exclusively used for domestic purposes or for watering cattle.			
		INDUS INUNDATION CANALS.	RATE PER ACRE.		
		OCCUPIERS' RATES.			
			On the Kadra Canal.	On all other canals.	
			R. A. P.	Rs. A. P.	
Irrigation Branch Notification No. 0376 R. I., dated 2nd October 1912.	...	Kharif flow	1 8 0	1 0 0	
		" lift	0 12 0	0 8 0	
		Rabi flow	0 12 0	0 8 0	
		" lift	0 6 0	0 4 0	
		Special rate for rice in the Dem Ghazi Khan and Jampur tahsils ... ... ...	...	1 4 0	
		Provided that all lands irrigated from the Mussoowah Canal lying in the villages of Rori and Bet Laddha shall be entirely exempt from all occupiers' rates and that all lands irrigated from the said canal lying in the villages of Mari Pachadi and Mari Darriyani shall be subject to only half of the above-mentioned occupier's rate:			
		Provided also that when irrigation is done by canal and torrent or canal and river flood water mixed and would have been done in any case without the aid of the canal, occupiers' rates shall not be charged in respect of such irrigation. When, however, torrent or river flood waters are carried by the canal and managed and distributed as part of the canal supply, the above-mentioned occupiers' rates shall be charged in respect of any irrigation done by such waters.			

STATEMENT SHOWING OCCUPIER'S RATE AND OWNER'S RATE IN FORCE ON THE CANALS IN THE PUNJAB DURING THE YEAR 1915-16.—CONTINUED.

Authority.	Class.	Nature of crops.	RATE PER ACRE.		Per		
			Flow.	Lift.			
		INDUS INUNDATION CANALS—CONCLUDED.					
		OCCUPIER'S RATES—concluded.					
Irrigation Branch Notification No. 0849 R. I., dated 4th October 1915.	...	In exercise of the powers conferred by section 75 of the Northern India Canal and Drainage Act, VIII of 1878, as amended by Act IV of 1914, the Lieutenant-Governor of the Punjab is pleased to direct the publication of the following Schedule of Rates to be charged for irrigation from the Dera Ghazi Khan High Level Supply Channel, taking out from the Manki Canal of the Indus Inundation Canals Series and for the supply of water for purposes other than irrigation:—	Rs. A. P.				
		All crops	6 0 0		Acre.		
		Miscellaneous rates for purposes other than irrigation,					
		Brick-making and pier wall building ...	0 8 0		100 cubic feet.		
		Laying concrete and brick or stone masonry ...	0 2 0		Ditto.		
		Metalling roads	10 0 0		Mil.		
		Water supplied in bulk	1 0 0		2,500 cubic feet.		
		Watering road-side or avenue trees ...	6 0 0		Canal mile of 5,000 feet per crop.		
		SHAHPUR (IMPERIAL) INUNDATION CANALS.					
		OCCUPIER'S RATES.					
		For the Canals in Shahpur and Bhara tahsils.	Rs. A. P.	Rs. A. P.			
Irrigation Branch Notification No. 1370 R. I., dated 19th November 1894.	..	Rice	3 8 0	1 4 0	Acre.		
		All other crops	2 8 0	1 4 0	Do.		
		Grass lands	1 4 0	1 4 0	Do.		
		SHAHPUR (PROVINCIAL) INUNDATION CANALS.					
		OCCUPIER'S RATES.					
		<i>Ranitak.</i>					
Settlement Report, 1887—1894, paragraph 100.	...	Rice	3 8 0	1 4 0	Acre.		
		All other crops	2 8 0	1 4 0	Do.		
		Grass lands	1 4 0	1 4 0	Do.		
		<i>Corby wak.</i>					
		All crops	1 8 0	0 12 0	Acre.		
		Grass lands	0 2 0	0 1 0	Do.		
		MUZAFFARGARH INUNDATION CANALS.					
		OCCUPIER'S RATES.					
		<i>Chenab Canals.</i>					
Irrigation Branch Notification No. 052 R. I., dated 7th July 1903; and 1st; 1st May 1904, 2nd, 1st.	I	Rice, gardens and pepper	4 4 0	1 2 0	Acre of matured crop.		
	II	Cotton, sugarcane and indigo	1 8 0	0 12 0	Ditto.		
	III	Other kharif crops	1 2 0	0 9 0	Ditto.		
	IV	Rabi crops	0 12 0	0 6 0	Ditto.		
Irrigation Branch Notification No. 431 R. I., dated 4th May 1907.	V	Grass lands	0 6 0	0 3 0	Ditto.		
		<i>Note.—The rate for grass lands to be assessed at the discretion of the Deputy Commissioner.</i>					

STATEMENT SHOWING OCCUPIER'S RATE AND OWNER'S RATE IN FORCE ON THE CANALS IN THE PUNJAB DURING THE YEAR 1915-16—CONTINUED.

Authority.	Class.	Nature of crops.	RATE PER ACRE.		Per
			Flow.	Lift.	
		MUZAFFARGARH INUNDATION CANALS—CONCLUDED. OCCUPIERS' RATES—concluded. <i>Indus Canals.</i>	Rs. A. P.	Rs. A. P.	
Irrigation Branch Notification No. 652 R. I., dated 7th July 1903.	I	Rice, gardens and pepper	1 8 0	1 6 0	Acre of matured crop.
	II	Cotton, sugarcane and indigo	1 0 0	0 8 0	Ditto.
	III	Other kharif crops	0 12 0	0 6 0	Ditto.
	IV	Rabi crops	0 8 0	0 4 0	Ditto.
Irrigation Branch Notification No. 684 R. I., dated 4th May 1907.	V	Grass lands	0 4 0	0 2 0	Ditto.
		NOTE.—The rate for grass lands to be assessed at the discretion of the Deputy Commissioner.			
		GHAGGAR INUNDATION CANALS. (BRITISH).			
		OCCUPIERS' RATES.			
Irrigation Branch Notification No. 348 R. I., dated 27th November 1903.	I	Sugarcane	8 8 0	4 4 0	Acre matured per crop.
	II	Rice and water-nuts	6 0 0	3 0 0	Ditto.
	III	All other crops	2 8 0	1 4 0	Ditto.
		PROVISO.—Provided that no occupiers' rates shall be levied in respect of any land for the time being assessed to fluctuating land revenue.			
		DELHI AND GURGAON WORKS.	Rate per acre.		
		OCCUPIERS' RATE.	Rs. A. P.		
Irrigation Branch Notification No. 653 R. I., dated 6th April 1898.	...	All crops	0 6 4½	Acre.	
		Grass	0 3 3½	Dr.	
		NOTE.—This schedule is the same as that published in Notification No. 5233 R. I., dated 8th December 1873, which is hereby superseded.			
		SCHEDULE OF RATES FOR SUPPLY OF WATER FOR PURPOSES OTHER THAN IRRIGATION.			
		WESTERN JUMNA CANAL, UPPER BARI DOAR CANAL, SIRhind CANAL, LOWER CHINAB CANAL, LOWER JELLMU CANAL, UPPER CHINAB CANAL, LOWER BARI DOAR CANAL, UPPER SETTLES CANALS, LOWER SONAG AND PANA CANALS, SIDHNAI AND SUBSIDIARY CANALS, LOWER SETTLES AND CHINAB CANALS, INDUS CANALS, MUZAFFARGARH CANALS, SHAHPUR CANALS.			
Irrigation Branch Notifications Nos. 651 R. I., dated 5th April 1898, 276 R. I., dated 16th December 1902, 540 R. I., dated 22nd April 1913, and 0105 R. I., dated 25th June 1913.	...	Brick-making and pit/wall building ...	0 3 0	100 cubic feet.	
		Laying concrete and brick or stone masonry ...	0 2 0	Ditto.	
		Metalling roads	10 0 0	Mile.	
		Water supplied in bulk	1 0 0	2,500 cubic feet.	
Irrigation Branch Notification No. 325 R. I., dated 29th October 1908.	...	Watering roadside or avenue trees ...	2 8 0 5 0 0	Canal mile of 5,000 feet, for kharif crop. Canal mile of 5,000 feet, for rabi crop.	
Irrigation Branch Notification No. 0237 R. I., dated 28th September 1911.	...	PROVISO.—Except within the limits of Civil Stations, Cantonments and Municipalities no charge will be made for water used for the manufacture of bricks not subsequently burnt in a kiln or for pit-wall building, if taken from a water-course or tank lawfully supplied from a canal and if such bricks or walls are for buildings owned by cultivators having a share in the water-course.			

PUNJAB PROVINCE.

IRRIGATION BRANCH

ADMINISTRATIVE ACCOUNTS

FOR THE YEAR

1915-16.

No. Irr. 15-4—

Dated _____ 1916.

Copy forwarded to _____

Accountant-General, Punjab.

TABLE OF CONTENTS.

MAJOR WORKS.

No. 1. GENERAL ABSTRACT OF FINANCIAL RESULTS;

Canals in operation.

						Page.
WESTERN JUNNA CANAL—						
No. 2 Capital account	...	...	...	...	...	6
" 3 Revenue account	...	...	...	...	...	8
" 4 Interest account	...	...	...	...	...	10
" 5 Indirect charges account	...	...	...	...	...	10
" 6 Statement comparing charges to date with sanctioned estimates	...	...	...	...	...	11
UPPER BARI DOAB CANAL—						
No. 2 Capital account	...	...	...	...	...	12
" 3 Revenue account	...	...	...	...	...	14
" 4 Interest account	...	...	...	...	...	15
" 5 Indirect charges account	...	...	...	...	...	15
" 6 Statement comparing charges to date with sanctioned estimates	...	...	...	...	...	15
SIRhind CANAL—						
No. 2 Capital account	...	...	...	...	...	16
" 3 Revenue account	...	...	...	...	...	18
" 4 Interest account	...	...	...	...	...	20
" 5 Indirect charges account	...	...	...	...	...	20
" 6 Statement comparing charges to date with sanctioned estimates	...	...	...	...	...	21
LOWER CHENAB CANAL—						
No. 2 Capital account	...	...	...	...	...	22
" 3 Revenue account	...	...	...	...	...	24
" 4 Interest account	...	...	...	...	...	25
" 5 Indirect charges account	...	...	...	...	...	25
" 6 Statement comparing charges to date with sanctioned estimates	...	...	...	...	...	25
UPPER SUTLEJ INUNDATION CANALS INCLUDING LOWER SONAq AND PABA—						
No. 2 Capital account	...	...	...	...	...	26
" 3 Revenue account	...	...	...	...	...	27
" 4 Interest account	...	...	...	...	...	28
" 5 Indirect charges account	...	...	...	...	...	28
" 6 Statement comparing charges to date with sanctioned estimates	...	...	...	...	...	28
SIDHNAI CANAL—						
No. 2 Capital account	...	...	...	...	...	29
" 3 Revenue account	...	...	...	...	...	31
" 4 Interest account	...	...	...	...	...	32
" 5 Indirect charges account	...	...	...	...	...	32
" 6 Statement comparing charges to date with sanctioned estimates	...	...	...	...	...	32
LOWER JHELUM CANAL—						
No. 2 Capital account	...	...	...	...	...	33
" 3 Revenue account	...	...	...	...	...	35
" 4 Interest account	...	...	...	...	...	36
" 5 Indirect charges account	...	...	...	...	...	36
" 6 Statement comparing charges to date with sanctioned estimates	...	...	...	...	...	36
INDUS INUNDATION CANALS—						
No. 2 Capital account	...	...	...	...	...	37
" 3 Revenue account	...	...	...	...	...	39
" 4 Interest account	...	...	...	...	...	40
" 5 Indirect charges account	...	...	...	...	...	40
" 6 Statement comparing charges to date with sanctioned estimates	...	...	...	...	...	40

Canals under construction.

UPPER CHENAB CANAL—						
No. 2 Capital account	...	...	...	...	...	41
" 3 Revenue account	...	...	...	...	...	43
" 4 Interest account	...	...	...	...	...	44
" 5 Indirect charges account	...	...	...	...	...	44
" 6 Statement comparing charges to date with sanctioned estimates	...	...	...	...	...	44
LOWER BARI DOAB CANAL—						
No. 2 Capital account	...	...	...	...	...	45
" 3 Revenue account	...	...	...	...	...	47
" 4 Interest account	...	...	...	...	...	48
" 5 Indirect charges account	...	...	...	...	...	48
" 6 Statement comparing charges to date with sanctioned estimates	...	...	...	...	...	48
UPPER JHELUM CANAL—						
No. 2 Capital account	...	...	...	...	...	49
" 3 Revenue Account	...	...	...	...	...	50
" 4 Interest account	...	...	...	...	...	51
" 5 Indirect charges account	...	...	...	...	...	51
" 6 Statement comparing charges to date with sanctioned estimates	...	...	...	...	...	51

MINOR WORKS AND NAVIGATION.

No. I. GENERAL ABSTRACT OF FINANCIAL RESULTS.

(1). Ordinary works of Irrigation and Navigation.

Canals in operation.

Imperial.

<i>(a). Works for which Canal and Revenue accounts are kept</i>						<i>Page.</i>
SHANIPUR CANALS—						
No. 2 Capital account	...	...	...	...	...	52
“ 3 Revenue account	...	...	...	...	...	53
“ 5 Indirect charges account	...	...	...	...	...	54
“ 6 Statement comparing charges to date with sanctioned estimates						54
CHAGGAB CANALS—						
No. 2 Capital account	...	...	...	...	...	55
“ 3 Revenue account	...	...	...	...	...	57
“ 5 Indirect charges account	...	...	...	...	...	59
“ 6 Statement comparing charges to date with sanctioned estimates						59
<i>(b). Works for which only Revenue accounts are kept.</i>						
LOWER SUTLEJ INUNDATION CANALS INCLUDING HAJIWAH CANALS PROJECT—						
No. 3 Revenue account	...	...	...	...	...	60
“ 5 Indirect charges account	...	...	...	...	...	61
LOWER SUTLEJ INUNDATION CANALS INCLUDING HAJIWAH CANALS—						
No. 3 Revenue account	...	...	...	...	...	62
“ 5 Indirect charges account	...	...	...	...	...	63
GHENAH INUNDATION CANALS—						
No. 3 Revenue account	...	...	...	...	...	64
“ 5 Indirect charges account	...	...	...	...	...	65
MUZAFFARGARH INUNDATION CANALS—						
No. 3 Revenue account	...	...	...	...	...	66
“ 5 Indirect charges account...	...	...	...	...	...	67

Provincial.

<i>(b). Works for which only Revenue accounts are kept.</i>						
SHANIPUR CANALS—						
No. 3 Revenue account	...	...	...	...	...	68
“ 5 Indirect charges account	...	...	...	...	...	69
RATI INUNDATION CANALS—						
No. 3 Revenue account	...	...	...	...	...	70
“ 5 Indirect charges account	...	...	...	...	...	71

ERRATA TO ADMINISTRATIVE ACCOUNTS, PUNJAB PROVINCE, FOR 1916-16.

Page No.	Line.	Column.	For.	Read.
	<i>Canals under construction.</i>			
2	Lower Bari Doab Canal ..	2	2,16,69,940	2,13,69,940
"	Ditto ..	4	2,23,28,402	2,20,28,402
"	Total Canals under construction ..	2	10,10,41,805	10,07,41,805
"	Ditto ..	4	10,30,81,985	10,30,81,985
"	Grand Total Canals in operation and under construction.			
"	Imperial ..	2	21,82,18,949	21,79,18,949
"	Ditto ..	4	22,53,98,576	22,50,98,576
46	II Establishment.			
"	Total ..	5	35,49,734	32,49,734
"	Grand Total ..	5	2,10,51,940	2,16,51,940
"	Net Total ..	5	2,16,69,940	2,13,69,940

SUBSTITUTE FOR FORM No. 6.—STATEMENT COMPARING CHARGES TO DATE WITH SANCTIONED ESTIMATE OF THE LOWER BARI DOAB CANAL.—(Page 48.)

PARTICULARS.	CURRENT SANCTIONS.				REMARKS.
	Charges to date.	Amount of Sanctioned Estimate.	Unspent Balance of Estimate.	Total charges to date against old and current sanctions.	
	Rs.	Rs.	Rs.	Rs.	
DIRECT CHARGES—					
Works ..	1,55,23,300	1,63,86,298	8,62,902	1,55,23,300	
Establishment ..	27,30,133	32,49,734	5,19,601	27,30,133	
Tools and Plant ..	15,12,988	17,15,90	2,02,920	15,12,988	
Suspense Balances ..	9,62,469	3,00,000	— 6,62,460	9,62,469	
Total ..	2,07,28,896	2,16,51,940	9,23,044	2,07,28,896	
Less Receipts on Capital Account.	61,932	2,82,000	2,20,068	61,932	
Not Total ..	2,06,66,964	2,13,69,940	7,02,976	2,06,66,964	
INDIRECT CHARGES—					
Capitalized abatement of Land Revenue.	43,750	1,47,500	1,03,750	43,750	
Leave and Pension Allowances.	3,71,278	6,10,962	1,39,094	3,71,278	
Total ..	4,15,028	6,58,462	2,43,134	4,15,028	
GRAND TOTAL ..	2,10,81,992	2,20,28,402	9,46,410	2,10,81,992	Revised Estimate sanctioned in Secretary of State's Despatch No. 5 P. W., dated the 17th February 1911. Rs. 3,00,000 under Establishment transferred to Upper Jhelum Canal as per Government of India, P. W. D. No. 645 A. I., dated the 9th June 1915.

IRRIGATION BRANCH.

2

PUBLIC WORKS

ADMINISTRATIVE ACCOUNTS

No. 1.—General Abstract of Financial Results showing the Estimated Cost of Construction
and the Interest on the Debt incurred in respect

Name of Project.	ESTIMATED COST OF CONSTRUCTION.			CAPITAL OUTLAY INCLUSIVE OF INDIRECT			
	Direct charges.	Indirect charges.	Total.	During 1915-16.		Total to end of	Direct charges
				Direct charges.	Indirect charges.		
PRODUCTIVE WORKS.							
<i>Canals in Operation.</i>	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<i>Imperial.</i>							
Western Jumna Canal 1,67,36,023	6,10,045	1,75,46,068	14,827	1,032	15,650	1,68,82,347	
Upper Bari Doab Canal 2,07,47,001	7,31,804	2,14,70,805	8,30,685	9,267	3,49,182	2,11,30,402	
Sirhind Canal 2,43,90,260	12,10,541	2,60,06,802	63,970	174	44,144	2,43,45,111	
Lower Chenab Canal 8,10,65,103	7,16,544	3,18,11,647	92,770	3,052	96,722	3,10,32,899	
Upper Sutlej Inundation Canals including Lower Sohag and Para, Sirhind Canals 10,96,822	1,00,592	17,97,414	11,324	278	11,602	17,17,354	
Lower Jhelum Canal 12,47,657	40,317	12,87,674	—960	...	—960	12,90,744	
Indus Inundation Canals 1,83,96,782	5,68,206	1,89,63,988	13,673	627	14,300	1,55,70,641	
TOTAL IMPERIAL 28,91,806	31,607	29,23,413	1,47,387	3,037	1,51,024	28,93,300	
TOTAL IMPERIAL 11,71,77,144	42,39,447	12,14,16,591	6,82,670	18,967	7,01,637	11,48,68,048	
<i>Contribution.</i>							
Western Jumna Canal 11,60,478	..	11,60,478	..	..	..	11,60,478	
Sirhind Canal 1,43,99,635	...	1,43,99,635	58,854	..	58,854	1,53,02,005	
TOTAL CONTRIBUTION 1,55,60,013	..	1,55,60,013	58,854	..	58,854	1,51,62,483	
TOTAL CANALS IN OPERATION, IMPERIAL 11,71,77,144	42,39,447	12,14,16,591	6,82,670	18,967	7,01,637	11,48,68,048	
Do. CONTRIBUTION 1,55,60,013	...	1,55,60,013	58,854	..	58,854	1,51,62,483	
<i>Canals under construction.</i>							
Upper Chenab Canal 3,61,31,583	12,25,441	3,73,57,024	11,04,455	40,573	12,44,031	3,36,21,503	
Lover Bari Doab Canal 2,16,69,040	6,58,462	2,23,28,402	8,92,133	88,848	9,30,981	2,06,66,961	
Upper Jhelum Canal 4,32,40,282	10,56,277	4,42,06,560	18,94,961	48,779	10,43,740	4,15,91,296	
TOTAL CANALS UNDER CONSTRUCTION 10,10,41,805	20,40,180	10,39,81,985	39,81,552	1,87,260	41,18,752	9,58,72,703	
GRAND TOTAL CANALS IN OPERATION AND UNDER CONSTRUCTION. } IMPERIAL } 21,82,18,949 } 71,79,627 } 22,53,08,676 } 46,61,222 } 1,56,167 } 48,20,384 } 21,07,41,711 } CONTRIBUTION } 1,55,60,013 } ... } 1,55,60,013 } 58,854 } .. } 58,854 } 1,51,62,483 }							

(a)—The seeming excess over estimate is due to suspense balances
(b)—Excludes recoveries made by Native States and credited
(c)—Excludes share of Accounts Establishment commencing from
(d)—Includes Rs. 2,417 on account of owners' rates on Irrigated
(e)—Includes Rs. 1,538 on account of owners' rates on Irrigated

LAHORE :

The 1st September 1916.

DEPARTMENT.

PUNJAB PROVINCE.

FOR THE YEAR 1915-16.

Minor Works, the capital outlay thereon, the Revenue derived therefrom, the working expenses of 1915-16.

DURING 1915-16.						WORKING EXPENSES AND MAINTENANCE DURING 1915-16, INCLUSIVE OF INDIRECT CHARGES NOS. 3 AND 5.			NET RESULT, EXCLUDING INTEREST, DIFFERENCE BETWEEN REVENUE AND WORKING EXPENSES.			NET RESULTS, INCLUDING INTEREST.				
Actual transactions of the year.	Adjustment on account of previous year.	Collected with Land Revenue.	Total.	Actual transactions of the year.	Adjustment on account of previous year.	Total.	Direct charges.	Indirect charges.	Total.	Excess revenue (surplus).	Excess expenditure (deficit).	Rate per cent.	Simple Interest during 1915-16.	Excess revenue (surplus).	Excess expenditure (deficit).	Rate per cent.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
15,107	..	15,107	92,201	..	92,201	49,513	3,374	52,887	30,314	..	18,20	..				
..	17,540	..	17,540	33,382	2,621	36,013	..	18,473	..	4.01				
15,107	..	15,107	1,00,741	..	1,00,741	82,903	5,005	88,900	30,314	18,473	3.52	..				
..	1	..	1	4,703	..	4,703	..	4,703	..	1.00				
3,11,338	..	3,11,338	0,21,740	..	0,21,740	2,70,992	14,631	2,85,684	3,36,150							
2,61,100	..	2,64,100	4,71,625	..	4,71,625	1,66,612	7,041	1,72,563	2,00,072							
3,70,284	..	3,70,284	0,16,213	..	0,16,213	3,40,985	17,802	3,57,977	2,88,236							
8,45,812	..	8,46,812	17,38,578	..	17,38,578	7,76,590	30,524	8,10,114	0,23,404							
0,457	..	0,457	30,359	..	30,359	36,207	2,950	40,053	..	4,504						
888	..	888	1,270	..	1,270	2,000	203	2,383	..	1,118						
7,346	..	7,346	37,620	..	37,620	40,387	2,940	40,530	..	5,707						

W. ALDER,

Accountant-General, Punja.

IRRIGATION BRANCH

OFFICE OF
ADMINISTRATIVE ACCOUNTS.
Western Jumna Canal
No. 2.—CAPITAL ACCOUNT FOR

HEADS OF ACCOUNT.	DIRECT CHARGES.									Cost of construction as now estimated (Construction Limited closed on 31st March 1895.)	Expenditure against Estimates.		
	IMPERIAL.			CONTRIBUTION.			TOTAL.						
	Previous.	1915-16.	Total.	Previous.	1915-16.	Total.	Previous.	1915-16.	Total.				
I.—WORKS.													
I. HEAD WORKS—	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.				
B.—Land ..	4,710	..	4,710	..	..	..	4,710	..	4,710		
C.—Works ..	4,10,440	..	4,10,440	5,928	..	5,928	4,21,768	..	4,24,766				
K.—Buildings ..	30,923	2,388	42,311	..	..	..	30,923	2,388	42,311		
O.—Miscellaneous ..	13,530	..	13,530	..	..	..	13,530	..	13,530		
P.—Maintenance ..	24,839	..	24,839	..	..	..	24,839	..	24,839		
TOTAL	..	6,02,451	2,388	6,04,839	6,328	6,328	6,07,779	2,388	6,10,167				
2. MAIN CANAL AND BRANCHES													
A.—Preliminary Expenses	50,508	..	50,508	4,760	4,760	4,760	55,388	..	55,388				
B.—Land ..	2,68,080	462	2,68,542	22,260	22,260	22,260	2,80,340	452	2,80,801				
D.—Regulators ..	2,43,801	165	2,44,066	25,671	25,671	25,671	2,69,502	105	2,69,727				
E.—Falls and Weirs ..	3,01,931	467	3,01,406	42,008	42,008	42,008	4,03,030	467	4,03,500				
F.—River and Hill Torrent Works.	2,719	..	2,719	1,051	1,051	1,051	3,800	..	3,800				
F.—(1)—Other Cross Draining Works.	2,23,617	..	2,23,617	11,137	11,137	11,137	2,64,751	..	2,64,751				
G.—Bridges ..	8,25,608	..	8,25,608	61,270	61,270	61,270	8,77,078	..	8,77,078				
H.—Escapes ..	3,40,413	..	3,40,413	43,419	43,419	43,419	3,83,852	..	3,83,852				
I.—Navigation Works ..	10,57,606	..	10,57,900	20,364	20,364	20,364	14,17,960	..	14,17,960				
J.—Mills ..	55,115	..	55,115	3,635	3,635	3,635	58,050	..	58,050				
K.—Buildings ..	6,50,923	10,609	6,69,532	45,175	45,175	45,175	7,01,405	10,609	7,16,107				
L.—Earth-work ..	10,91,367	..	10,91,367	1,98,666	1,98,666	1,98,666	20,93,031	..	20,93,031				
M.—Plantations ..	10,032	..	10,032	4,650	4,650	4,650	23,682	..	23,682				
O.—Miscellaneous ..	54,280	..	54,280	3,764	3,764	3,764	58,057	..	58,057				
P.—Maintenance ..	1,58,861	..	1,58,861	18,411	18,411	18,411	177,303	..	177,303				
TOTAL	..	65,42,330	11,783	65,54,113	5,93,795	5,93,795	70,70,125	11,783	70,87,008				
3. DISTRIBUTORIES—													
A.—Preliminary Expenses	65,053	..	65,053	12,073	12,073	12,073	78,026	..	78,026				
B.—Land ..	3,11,091	—70	3,11,018	0,915	0,915	0,915	3,18,046	—70	3,17,967				
C.—Works ..	11,97,711	..	11,97,711	1,30,928	1,30,928	1,30,928	13,18,047	..	13,18,047				
L.—Earth-work ..	14,05,267	..	14,05,267	1,65,012	1,65,012	1,65,012	15,70,869	..	15,70,869				
O.—Miscellaneous ..	3,88,680	..	3,88,680	29,350	29,350	29,350	4,18,230	..	4,18,230				
P.—Maintenance ..	54,927	..	54,927	12,583	12,583	12,583	67,509	..	67,509				
TOTAL	..	34,12,024	—70	34,12,645	3,58,403	3,58,403	37,71,327	—70	37,71,326				

ACCOUNTANT-GENERAL:

PUNJAB PROVINCE.

FOR THE YEAR 1915-16.

Project.

AND TO END OF 1915-16.

HEADS OF ACCOUNT	DIRECT CHARGES.										Cost of construction as now estimated (Construction Estimate closed on 31st March 1905).	Expenditure against closed Estimates.
	IMPERIAL			CONTRIBUTION			TOTAL					
	Previous	1915-16	Total	Previous	1915-16	Total	Previous	1915-16	Total	Rs.	Rs.	Rs.
4. DRAINAGE AND PROTECTIVE WORKS—	Rs	Rs	Rs.	Rs	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.
A.—Preliminary Ex- penses.	20,301	..	20,301	1	..	1	20,302	..	20,301			
B.—Land	59,225	..	59,225	..	..	..	59,225	..	59,225			
C.—Works	2,08,426	..	2,08,426	..	..	..	2,08,426	..	2,08,426			
D.—Earth-work	4,27,161	..	4,27,161	3,113	..	3,113	4,30,677	..	43,0677			
E.—Miscellaneous..	22,647	..	22,647	..	..	..	22,647	..	22,647			
TOTAL ..	7,38,963	..	7,38,963	3,114	..	3,114	7,41,177	..	7,41,177			
TOTAL I.—WORKS..	1,11,95,764	14,092	1,12,09,560	9,00,010	..	8,00,010	1,20,06,409	14,092	1,21,10,500			
Add expenditure on general works at end of 1861-65.	19,21,123	..	19,21,123	..	..	..	19,24,123	..	19,24,123			
TOTAL ..	1,31,10,491	14,092	1,31,33,985	9,00,610	..	8,00,610	1,40,20,531	14,092	1,40,34,023	1,40,87,806	1,40,63,919	
II.—ESTABLISHMENT												
5. DIRECTION (a) ...	6,09,865	683	6,09,551	43,545	..	43,545	6,52,413	683	6,53,006			
6. EXECUTIVE ...	23,09,450	2,561	24,01,031	1,57,982	..	1,57,981	25,66,332	2,581	25,58,013			
7. SPECIAL SURVEY ...	1,31,782	..	1,31,782	6,066	..	6,066	1,37,846	..	1,37,846			
8. SPECIAL FIELD SUR- VEY.	85	..	85	..	..	..	85	..	85			
LEAVE AND PENSION ALLOWANCES.	..	..	..	20,040	..	20,040	20,040	..	20,040			
TOTAL ..	31,39,188	3,261	31,42,452	2,36,642	..	2,36,512	33,75,730	3,261	33,78,991			
Add expenditure on general works at end of 1861-65.	1,85,590	..	1,85,590	..			1,85,590	..	1,85,590			
TOTAL ..	33,24,778	3,264	33,28,012	1,30,512	..	2,36,512	35,61,581	3,261	35,61,581	35,68,403	35,63,559	
III.—TOOLS AND PLANT												
9. NAVIGATION PLANT	1,033	..	1,033	206	..	206	2,231	..	2,231			
12. MISCELLANEOUS ...	1,01,801	226	1,02,120	18,420	..	18,420	2,10,330	226	2,10,558			
13. REPAIRS AND CARE- PLATE.	23,073	..	23,073	6,011	..	6,011	29,014	..	29,014			
TOTAL ..	2,17,407	226	2,18,016	23,768	..	23,768	2,41,575	226	2,41,803	2,42,066	2,41,770	
IV.—SUSPENSE AC- COUNT.												
14. STOCK ..	2,13,188	114	2,13,332	..	..	..	2,13,188	144	2,13,332			
15. STOCK PURCHASES...	—10	—171	—190	..	..	..	—10	—171	—190			
15a. STOCK SALES ..	1,827	—1,827	..	..	..	..	1,827	—1,827	..			
16. MISCELLANEOUS AD- VANCES	1,720	—1,103	620	..	..	..	1,720	—1,103	620			
TOTAL ..	2,10,726	—2,057	2,13,708	..	..	..	2,16,725	—2,057	2,13,705			
GRAND TOTAL ..	1,68,70,201	14,027	1,68,93,828	11,60,050	..	11,60,950	1,80,40,151	14,027	1,80,64,778	1,70,08,454	1,78,71,248	
V.—LESS RECEIPTS ON CAPITAL AC- COUNT.	11,481	..	11,481	472	..	472	11,053	..	11,053	11,063	11,053	
NET TOTAL ..	1,68,07,720	14,027	1,68,82,317	11,60,478	..	11,60,478	1,80,28,108	14,027	1,80,42,825	1,78,06,501	1,78,60,295	
APPORTIONMENT:												
49.—IRRIGATION WORKS	1,68,07,720	14,027	1,68,82,347	11,60,478	..	11,60,178	1,80,28,108	14,027	1,80,42,825			

(a). Share of accounts excluded under Imperial from 1912-13.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Western Jumna Canal Project.

No. 3—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS.	IMPERIAL.			CONTRIBUTION.			TOTAL.		
	Previous.	1915-16.	Total.	Previous.	1915-16.	Total.	Previous.	1915-16.	Total.
Occupiers' rates..	..	26,47,351	..	..	..	..	..	..	Rs.
Owners' rates on irrigated land.	..	..	..	..	..	..	..	..	Rs.
Sales of water ..	..	16,551	..	..	232	232	..	..	Rs.
Supply of towns..	..	..	..	..	..	..	..	..	Rs.
Receipts from Plantations.	..	21,784	..	..	697	697	..	..	Rs.
Receipts from other Canal produc.	..	854	..	..	14	14	..	..	Rs.
Water-power ..	..	6,263	..	..	327	327	..	..	Rs.
Navigational Receipts.	..	53,284	..	..	..	..	..	..	Rs.
Rent of Buildings	..	6,990	..	..	320	320	..	..	Rs.
Fines ..	..	1,750	..	..	117	117	..	..	Rs.
Miscellaneous and other Receipts.	..	23,814	..	..	232	232	..	..	Rs.
Total ...	9,12,34,018	27,77,663	9,70,11,581	31,206	1,706	33,001	9,42,65,316	27,70,269	9,70,44,585
Share of Land Revenue collected in the Civil Department.	1,85,69,604	2,30,696	1,87,99,500	..	..	..	1,85,69,604	2,30,696	1,87,99,500
Interest on salo-proceeds of waste lands benefited.	1,101	204	1,305	..	..	..	1,101	204	1,305
Total ..	1,85,69,605	2,30,696	1,88,00,805	..	..	..	1,85,69,605	2,30,696	1,88,00,805
TOTAL RECEIPTS	11,28,03,023	30,08,553	11,58,12,476	31,206	1,706	33,001	11,28,35,221	30,10,259	11,58,45,480

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL:
ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.
Western Jumna Canal Project.
No. 8—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

CHARGES.	IMPERIAL.			CONTRIBUTION.			TOTAL.		
	Previous	1915-16	Total	Previous	1915-16	Total	Previous	1915-16	Total
(I.A.)—EXTENSIONS AND IMPROVEMENTS	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(1).—HEAD WORKS	1,98,634	463	1,99,096	14,746	—437	14,300	2,13,386	10	2,13,401
(2).—MAIN CANAL AND BRANCHES	16,92,550	50,016	16,11,591	2,12,311	(a) 21,096	2,31,126	14,94,881	81,014	16,76,925
(3).—DISTRICT TUNNELS	6,09,640	76,464	6,06,504	56,513	2,107	56,513	6,65,163	56,801	7,22,017
(4).—DEMINING AND PROTECTIVE WORKS	66,718	2,142	68,860	2,107	...	116	50,513	68,823	71,083
TOTAL I.A..	21,56,547	1,18,504	22,74,5	2,87,607	21,077	3,07,371	21,42,214	1,40,182	25,82,426
(I.B.)—MAINTENANCE AND REPAIRS									
(1).—HEAD WORKS	18,01,719	50,016	18,51,766	80,761	2,600	83,354	18,82,470	62,519	19,35,022
(2).—MAIN CANAL AND BRANCHES	71,35,319	3,90,662	71,05,981	4,23,589	17,577	4,41,155	74,01,908	3,48,228	70,10,130
(3).—DRAINAGE TUNNELS	30,59,102	1,87,711	41,46,816	1,71,219	...	1,71,219	41,20,321	1,65,714	43,15,035
(4).—DRAINAGE WORKS	4,56,571	12,262	5,28,833	17,042	...	18,913	5,04,502	43,195	5,47,747
TOTAL I. B..	1,33,81,711	6,08,688	1,39,43,399	6,03,743	20,008	7,15,711	1,40,78,854	6,20,686	1,47,07,940
(I.C.)—COMPENSATION									
(1).—ESTABLISHMENT	1,01,755	1,173	1,02,928	2,021	—20	2,001	1,03,806	1,163	1,04,969
(2).—DIRECTION AND ACCOUNT (d)	20,52,380	57,989	21,10,369	82,700	4,573	87,372	21,35,170	62,602	21,97,741
(3).—EXECUTIVE ESTABLISHMENT	79,19,487	2,00,676	81,21,872	3,78,491	10,386	3,48,880	81,57,070	3,12,773	84,70,752
(7.A.)—REVENUE DO.	69,75,739	2,05,876	(e) 61,77,771	1,38,500	...	1,38,500	61,04,336	2,05,032	63,10,170
(7.B.)—NAVIGATION ESTABLISHMENT	17,246	180	17,135	...	...	...	17,246	180	17,135
(7.C.)—PLANTATION ESTABLISHMENT	790	...	790	...	...	...	790	...	790
(7.D.)—DRAWING AND PENSION ALLOWANCES	...	...	...	78,342	2,104	80,446	78,342	2,108	80,450
(7.E.)—MILLS AND MACHINERY	1,123	...	1,123	...	...	...	1,123	3	1,123
TOTAL ..	1,68,56,702	5,66,401	1,64,23,163	6,36,176	17,103	6,55,209	1,64,94,807	5,83,604	1,70,7
(1).—SCIENTIFIC INSTRUMENTS AND DRAWING MATERIAL									
(2).—PLANT AND MACHINERY	...	1,067	1,067	...	...	...	...	1,067	1,067
(3).—TOOLS	...	7,723	7,723	...	...	...	...	3,723	3,723
(4).—NAVIGATION PLANTS	...	1,705	1,705	...	...	...	...	1,705	1,705
(5).—CAMP EQUIPMENT	1,031	3,615	5,646	...	...	...	1,031	3,617	5,668
(6).—LIVESTOCK	...	46	46	...	...	...	...	46	46
(7).—OFFICE FURNITURE	...	1,765	1,765	...	...	...	...	1,765	1,765
(12).—MISCELLANEOUS	2,82,200	1,613	2,83,713	21,766	861	22,640	3,03,086	2,367	3,06,353
(8).—REPAIRS AND CARRIAGE	2,12,273	16,838	2,29,111	621	...	522	2,12,705	18,573	2,28,633
TOTAL ..	1,00,421	20,273	6,26,007	22,395	874	23,102	5,18,732	30,127	5,48,450
(IV).—REFUNDS OF REVENUE	3,04,012	(b) 2,202	3,70,241	...	...	...	3,66,012	2,202	3,70,344
(V).—PROFIT AND LOSS.	1,295	..	1,295	...	...	...	1,295	...	1,295
General work to end of 1604-05	48,02,523	..	48,02,523	...	...	...	48,02,523	...	48,02,523
TOTAL ..	3,72,78,080	13,26,215	3,85,84,333	16,11,701	6,661	17,04,371	3,88,00,73	13,60,914	4,02,86,707
Indirect Charges distributable to Revenue Account as per Account No. 5									
	20,10,770	81,371	27,91,150	...	...	...	20,10,770	61,371	27,01,150
TOTAL CHARGES Balanc, Net Revenue.	3,08,77,804	14,07,614	4,12,85,144	16,11,704	60,660	17,02,371	4,15,19,872	14,08,286	4,79,87,617
GRAND TOTAL	11,23,03,023	30,08,563	11,08,12,470	31,908	1,700	33,001	11,28,35,221	30,10,269	11,59,47,480

(a) Includes Rs. 17,108 on account of seigniorage during the year. Up to date Rs. 1,71,824.

(b) " " " on account of water rates and Rs. 1,638 on account of owners' rate.

(c) " " " on account of fees for collection of Revenue.

(d) Share of account excluded under Imperial from 1912-13.

(e) Rs. 6,10,270 more would have been earned had not owners' rates on certain lands irrigated been remitted in favour of Revenue assignees.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Western Jumna Canal Project.

No 4.—INTEREST ACCOUNT FOR AND TO END OF 1915-16.

	Amount.			Amount.
	Rs.			Rs.
Total Interest charges to end of 1914-15	2,23,16,519	Net Revenue realized to end of 1914-15	... 7,29,20,055	
Do. for the year 1915-16		Do. during 1915-16	... 16,00,937	
Total outlay to end of 31st March 1915 Rs. 1,68,75,317				
Less half outlay during 1915-16 ..Rs. 7,819				
	Rs. 1,68,75,038			
Interest at 3.4725 5,85,086				
	5,85,086			
Total 2,20,00,500				
Balanced Revenue after defraying Interest charges .. 5,16,24,492				
Total 7,45,20,002		Total 7,45,20,002		

No. 5—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

Particulars.	Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.
CAPITAL—			
Capitalization of abatement of Land Revenue 2,15,080		575	2,16,581
Leave and Pension Allowances .. { Imperial 5,03,170		457	5,03,627
Contribution 20,040		..	20,040
	8,38,205	1,032	8,39,237
DEDUCTION—			
Leave and Pension Allowances debited to Native States treated as direct charge and transferred to Account No. 2 of the Canal. 20,040		..	20,040
Net debitible to Imperial 8,09,156		1,032	8,10,188
REVENUE—			
Capitalization of abatement of Land Revenue 14,202		2,071	16,307
Leave and Pension Allowances .. { Imperial 26,05,487		79,290	26,84,763
Contribution 76,342		2,105	80,450
	26,98,121	83,471	27,81,600
DEDUCTION—			
Leave and Pension Allowances debited to Native States treated as direct charge and transferred to Account No. 3 of this Canal. 78,342		2,102	80,450
Net debitible to Imperial Revenue 26,19,779		81,371	27,01,150

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Western Jumna Canal Project.

No. 6.—STATEMENT COMPARING CHARGES TO DATE WITH SANCTIONED ESTIMATE.

PARTICULARS.	CHARGES AGAINST CLOSED SANCTIONS.			CURRENT SANCTIONS.			Total charges to date against old and current sanctions.	REMARKS.
	Expenditure against Construction Estimate.	Expenditure against open Sanctions.	Total.	Charges to date.	Amount of Sanctioned Estimate.	Unspent Balance of Estimate.		
IMPERIAL.								
DIRECT CHARGES.								
Works	1,02,90,277	63,75,000	1,31,65,277	—31,206	81,977	63,273	1,31,83,983	(a) Stry's No. 935 W.L. 21-1-11 = 10,800 " No. 01429 = 5,000 " " 22-3-12 = 1,000
Establishment ..	27,27,222	5,90,724	33,27,017	1,021	4,004	3,878	33,28,032	" No. 2134 W.L. = 4,000 " " 2204 W.L. = 3,126 " " 12-6-15 = 3,126
Tools and Plant ..	1,77,785	40,217	2,18,002	83	323	202	2,18,038	" No. 0102 W.L. = 3,121 " " 26-3-16 = 3,121 " " 0391 W.L. = 2069 " " 22-6-15 = 2069
Suspense Balances ..	..	..	..	2,13,768	..	—2,13,768	2,13,768	
Total ..	1,31,65,286	35,15,013	1,67,10,201	1,43,680	37,206	—1,16,321	1,68,83,828	37206
Less Receipts on Capital Account.	11,201	280	11,481	..	..	Nil	11,481	
Net Total ..	1,31,84,081	35,14,723	1,66,98,317	1,43,680	37,206	—1,16,324	1,68,82,347	
INDIRECT CHARGES.								
Capitalized abatement of Land Revenue.	1,53,167	63,394	2,16,561	..	..	..	2,16,561	
Leave and Pension Allowances.	5,12,004	81,300	5,93,484	143	..	—143	5,93,027	
Total ..	6,65,201	1,14,764	8,10,014	143	..	—143	8,10,188	
GRAND TOTAL ..	1,38,49,345	36,69,617	1,75,08,601	1,43,673	37,206	—1,16,407	1,70,02,535	
CONTRIBUTION.								
DIRECT CHARGES								
Works	8,31,341	60,299	9,00,610	..	..	..	9,00,610	
Establishment ..	2,17,408	10,014	2,30,512	..	..	..	2,30,512	
Tools and Plant ..	22,514	954	23,768	..	..	..	23,768	
Total ..	10,74,653	86,207	11,60,020	..	..	..	11,60,050	
Less Receipts on Capital Account.	472	..	472	..	..	..	472	
Net Total ..	10,74,181	86,207	11,60,178	..	..	..	11,60,178	
GRAND TOTAL ..	10,74,181	86,207	11,60,478	..	..	..	11,60,478	

OFFICE OF
ADMINISTRATIVE ACCOUNTS
Upper Bari
No. 2.—CAPITAL ACCOUNT

HEADS OF ACCOUNT.	DIRECT CHARGES.			Cost of construction as now estimated (Construction Estimate closed on 31st March 1890).	Expenditure against Closed Estimate.		
	Imperial.						
	Previous.	1 st JU.-JU.	Total.				
	Rs.	Rs.	Rs.				
I.—WORKS.							
1. HEAD WORKS—							
C.—Works	7,25,200	91,859	8,17,188				
K.—Buildings	63,031	..	63,031				
TOTAL	7,88,330	91,889	8,90,218				
2. MAIN CANAL AND BRANCHES—							
A.—Preliminary Expenses	8,186	..	8,186				
B.—Land	1,44,578	..	1,44,578				
D.—Regulators	3,52,039	..	3,52,039				
E.—Falls and Weirs	10,49,484	..	10,49,484				
F.—River and Hill Torrent Works ..	5,39,998	..	5,39,998				
F. (1).—Other Cross Drainage Works ..	1,18,245	..	1,18,245				
G.—Bridges	8,52,430	..	8,52,430				
H.—Escapes	6,38,733	..	6,38,733				
I.—Navigation Works	4,78,585	..	4,78,585				
J.—Mills	1,47,630	..	1,47,630				
K.—Buildings	10,01,366	67,989	10,72,338				
L.—Earth-work	38,60,463	3,716	39,73,109				
M.—Plantations	95,475	..	95,475				
O.—Miscellaneous	3,52,300	2,34,933	5,86,600				
P.—Maintenance	75,872	..	75,872				
TOTAL	1,06,27,312	3,06,091	1,09,33,103				
3. DISTRIBUTARIES—							
A.—Preliminary Expenses	24,333	..	24,333				
B.—Land	3,70,661	..	3,70,661				
C.—Works	16,28,151	—10	16,28,141				
L.—Earth-work	16,98,384	..	16,98,384				
O.—Miscellaneous	8,28,401	—1,411	3,27,980				
P.—Maintenance	8,354	..	8,354				
Add Dina Nagar Navigation Channel ..	35,770	..	35,770				
Shahpur Water Courses	63,427	..	63,427				
Lahore City Rajbaha	12,721	..	12,721				
TOTAL	41,70,501	—1,421	41,68,680				

ACCOUNTANT-GENERAL,

PUNJAB PROVINCE.

FOR THE YEAR 1915-16.

Doab Canal Project.

FOR AND TO END OF 1915-16.

HEADS OR ACCOUNTS.	DIRECT CHARGES.			Cost of construction as now estimated (Construction Estimate closed on 31st March 1910)	Expenditure against Closed Estimates.		
	Imperial.						
	Previous.	1915-16.	Total.				
	Rs.	Rs.	Rs.	Rs.	Rs.		
4.—DRAINAGE AND PROTECTIVE WORKS—							
A.—Preliminary Expenses	539	..	539				
B.—Land	6,519	..	6,519				
C.—Works	28,906	..	28,906				
D.—Earth-work	96,247	..	96,247				
E.—Miscellaneous	1,163	..	1,163				
TOTAL ..	1,33,374	..	1,33,374				
TOTAL I WORKS ..	1,57,10,317	3,00,650	1,60,16,870	1,60,98,768	1,67,26,596		
II.—ESTABLISHMENT							
5. Direction	8,34,851	13,468	8,48,319				
6. Executive	25,93,035	61,115	26,44,750				
7. Medical	5,465	..	5,465				
TOTAL ..	34,33,551	64,583	34,98,534	34,66,203	34,24,906		
III.—TOOLS AND PLANT.							
8. Navigation Plant	22	..	22				
Mill Plant	258	..	258				
Miscellaneous	9,01,046	0,191	9,13,237				
Repairs and Carriage	2,300	..	2,300				
TOTAL ..	9,06,086	9,191	9,15,877	11,00,675	8,95,225		
IV.—SUSPENSE ACCOUNT.							
14. Stock	0,02,856	—1,40,916	5,42,941				
15. Stock Purchases	—1,236	—318	—1,440				
15a. Stock Sale	146	—33	113				
16. Miscellaneous Advances	2,741	3,411	6,152				
17. London Invoices .. ..	..	..	..	
18. London Stores	53,101	16,302	69,403				
TOTAL ..	7,47,008	—1,30,448	6,17,160				
GRAND TOTAL ..	2,08,07,502	3,39,886	2,11,47,447	2,07,64,646	2,00,45,727		
V.—LESS RECEIPTS ON CAPITAL ACCOUNT.	10,955	..	16,956	16,956	16,955		
Net Total ..	2,07,90,607	3,39,886	2,11,30,492	2,07,47,691	2,00,28,772		
APPORTIONMENT.							
49.—Irrigation Works	2,07,90,607	3,39,886	2,11,30,492	..	..

(a). Share of accounts excluded from 1912-13.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16

Upper Bari Doab Canal Project.

No. 3 — REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS.	IMPERIAL			CHARGES.	IMPERIAL		
	Previous	1915-16	Total		Previous	1915-16	Total
Occupiers' rates ..	Rs. 9,22,27,012	Rs. 33,26,482	Rs. 9,60,53,498	(I.A.)—EXTENSIONS AND IMPROVEMENTS.	Rs. 3,32,870	Rs. 12,523	Rs. 3,45,395
				(1)—HEAD WORKS ..	14,25,037	27,764	14,52,811
				(2)—MAIN CANAL AND BRANCHES ..	11,97,182	56,217	12,53,999
				(3)—DISTRIBUTARIES ..	1,76,275	6,562	1,80,837
Owners' rates on irrigated land.	Rs. 5,575	..	Rs. 5,575	(4)—DRAINAGE AND PROTECTIVE WORKS.			
				TOTAL I. A. ..	31,30,934	1,02,058	32,33,042
Sales of water ..	Rs. 7,12,679	Rs. 19,139	Rs. 7,31,818	(I. B.)—MAINTENANCE AND REPAIRS.			
				(1)—HEAD WORKS ..	46,63,120	63,003	47,26,213
				(2)—MAIN CANAL AND BRANCHES ..	84,04,745	2,90,586	87,85,331
Supply of towns. ..	Rs. 2,393	Rs. 105	Rs. 2,503	(3)—DISTRIBUTARIES ..	42,44,686	1,59,863	44,04,549
				(4)—DRAINAGE WORKS ..	89,227	23,094	1,12,321
Receipts from Plantation ..	Rs. 10,22,357	Rs. 24,235	Rs. 10,46,595	TOTAL I. B. ..	1,74,91,778	Rs. 5,36,636	Rs. 1,80,28,414
				(I C.)—COMPENSATION.	40,000	250	40,322
Receipts from other canal produce.	Rs. 2,39,937	Rs. 777	Rs. 2,40,714	(II)—ESTABLISHMENT.			
				(4)—DIRECTION AND ACCOUNT ..	22,12,280	52,960	22,65,129
				(6)—EXECUTIVE ESTABLISHMENT ..	79,41,942	3,00,574	82,42,516
				(7)—MEDICAL Do. ..	1,12,074	5,272	1,17,946
Water power ..	Rs. 41,84,377	Rs. 1,13,350	Rs. 42,97,730	(7A)—REVENUE Do. ..	65,46,928	2,68,768	68,17,687
				(7B)—PLANTATION Do. ..	60,40,165	..	40,155
				(7D)—LEAVE AND PENSION ALLOWANCE. ..	52	..	52
				TOTAL ..	1,69,56,011	Rs. 6,27,474	1,74,83,485
Navigation Receipts ..	Rs. 5,477	..	Rs. 5,477	III TOOLS AND PLANTS.			
Rent of Buildings ..	..	Rs. 8,163	..	1. SCIENTIFIC INSTRUMENTS AND DRAWING MATERIALS. ..	..	105	105
Fines ..	Rs. 13,32,941	Rs. 2,081	Rs. 14,62,039	2. PLANT MACHINERY. ..	8,204	—62	8,142
Miscellaneous and other Receipts. ..	..	Rs. 1,08,004	..	3. TOOLS. ..	..	1,763	1,763
				4. NAVIGATION PLANTS. ..	..	36	30
				5. CAMP EQUIPAGE. ..	..	121	121
				6. LIVE STOCK. ..	..	157	157
				7. OFFICE FURNITURE. ..	..	2,295	2,295
				8. REPAIRS AND CARRIAGE. ..	2,64,692	18,608	2,83,300
				9. MISCELLANEOUS. ..	3,69,264	—6,007	3,03,167
				TOTAL III TOOLS & PLANTS ..	6,42,160	16,920	6,59,080
Total ..	Rs. 9,87,35,753	Rs. 41,03,802	Rs. 10,28,39,645	(IV). REFUNDS OF REVENUE	Rs. 1,67,271	Rs. 1,216	Rs. 1,68,487
Share of Land Revenue collected in the Civil Department.	Rs. 1,43,50,853	Rs. 5,49,988	Rs. 1,49,00,836	(V).—PROFIT AND LOSS..	Rs. 1,073		
Interest on sale proceeds of waste lands benefited.	Rs. 6,84,232	Rs. 66,310	Rs. 7,50,542	TOTAL ..	Rs. 3,83,36,343	Rs. 12,34,600	Rs. 3,96,22,903
				Indirect Charges debit able to Revenue Account as per Account No. 6.	Rs. 20,00,950	Rs. 89,221	Rs. 27,66,190
TOTAL ..	Rs. 1,50,35,085	Rs. 6,16,293	Rs. 1,66,51,378	TOTAL CHARGES ..	Rs. 1,10,05,312	Rs. 13,73,781	Rs. 4,23,79,093
				Balance, Net Revenue ..	Rs. 7,37,05,520	Rs. 33,46,404	Rs. 7,71,11,930
TOTAL RECEIPTS ..	Rs. 11,47,70,883	Rs. 47,20,185	Rs. 11,94,01,023	GRAND TOTAL ..	Rs. 11,47,70,883	Rs. 47,20,185	Rs. 11,94,01,023

(a). Share of Accounts excluded from 1912-13.

(b). Includes Rs. 1,09,082 on account of fees for collection of revenue.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Upper Bari Doab Canal Project.

No. 4—INTEREST ACCOUNT FOR AND TO END OF 1915-16.

	Amount.		Amount.
Total interest charges to end of 1914-15	... 3,38,48,076	Net Revenue realized to end of 1914-15	... 7,17,65,526
Do. for the year 1915-16	... " "	Do. during 1915-16	... 33,40,404
Total outlay to end of March 1916=Rs. 2,11,30,492	"		
Less half outlay during 1915-16= " 1,60,942	"		
Mean Capital at charge 2,09,60,550	"		
Interest at 3.4725 per cent. on above " ...	7,27,855		
Total ...	3,45,76,931		
Balance Revenue after defraying Interest charges ...	4,26,36,809		
Total ...	7,71,11,930	Total ...	7,71,11,930

No. 5.—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

	Particulars.	Previous.	1915-16.	Total.
CAPITAL—				
Capitalization of abatement of Land Revenue	... ... ...	Rs. 20,411	Rs. 225	Rs. 20,636
Leave and Pension Allowances	... ... ...	7,12,327	8,042	7,21,369
	Total ...	7,32,738	8,267	7,42,005
REVENUE—				
Capitalization of abatement of Land Revenue	... ... ...	18,100	1,375	19,674
Leave and Pension Allowances	... ... ...	26,48,770	87,846	27,36,616
	Total ...	26,66,869	89,221	27,56,180

No. 6.—STATEMENT COMPARING CHARGES TO DATE WITH SANCTIONED ESTIMATE.

PARTICULARS.	CHARGES AGAINST CLOSED SANCTIONS.			CURRENT SANCTIONS.			Total charges to date against old and current sanctions.	Authority	No. and date.	Amount
	Expenditure against Construction Estimate.	Expenditure against upon canal sanctions.	Total.	Charges to date.	Amount of Sanctioned Estimate.	Unspent Balance of Estimate.				
DIRECT CHARGES—										
Works ...	1,24,50,791	32,74,805	1,67,25,596	3,00,280	3,73,172	—17,108	1,61,15,874	G. I.	935 I., 10-6-14	1,22,939
Establishment ...	27,91,452	6,33,454	34,24,906	73,628	41,297	—32,331	34,98,534	Secy. I. B.	3368 W. I., 19-11-15	3,071
Tools and Plant ...	4,92,216	3,07,010	8,05,226	20,002	3,04,450	2,93,798	9,16,877	G. L.	470 I., 29-4-15	1,33,894
Suspense Balances	...	...	...	6,17,160	...	—6,17,160	0,17,160	Secy. I. B.	1138 W. I., 0-3-15	10,773
Total ...	1,57,40,458	43,05,260	2,00,45,727	11,01,720	7,18,919	—3,82,801	2,11,47,447	Secy. I. B.	731 W. I., 4-2-13	3,696
INDIRECT CHARGES—								G. L.	1745 I., 20-11-13	3,99,010
Less Receipts on Capital Account	16,955	...	16,955	...	...	...	16,955	S. E.	309, 20-1-16	857
								S. E.	7370, 22-11-15	2,658
								S. E.	1835, 22-3-15	230
Net Total ...	1,57,23,503	43,05,260	2,00,28,772	11,01,720	7,18,919	—3,82,801	2,11,30,492	Secy. I. B.	2706, 20-10-08	41,752
GRAND TOTAL ...	1,63,54,259	44,06,207	2,07,60,406	11,12,031	7,18,910	—3,93,112	2,18,72,497			7,18,919

IRRIGATION BRANCH.

PUNJAB PROVINCE,

OFFICE OF ACCOUNTANT-GENERAL,

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Sirhind Canal Project.

N.o 2—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OF ACCOUNT.	DIRECT CHARGES.										Cost of construction as now estimated (Construction Estimate closed on 31st March).	Expenditure against closed Estimates.
	IMPERIAL			CONTRIBUTION			TOTAL					
	Previous.	1915-16.	Total.	Previous.	1915-16.	Total.	Previous.	1915-16.	Total.			
I.—WORKS												
1. HEAD WORKS—	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.			
A.—Preliminary Ex- penses..	483	..	483	273	..	272	735	..	766			
B.—Land	7,063	..	7,063	3,074	..	3,074	11,037	..	11,037			
C.—Works	8,46,377	71,334	9,17,711	1,76,088	40,125	5,16,213	13,22,465	1,11,450	14,33,924			
K.—Buildings	67,313	1,752	69,065	37,803	980	38,849	1,05,176	2,738	1,07,914			
O.—Miscellaneous	73,804	..	73,804	3,538	..	3,538	77,342	..	77,342			
P.—Maintenance	24,104	..	24,104	13,559	..	13,550	37,663	..	37,663			
TOTAL	..	10,10,144	73,020	10,92,230	5,35,294	41,111	5,70,405	15,54,438	1,14,197	10,68,635		
2. MAIN CANAL AND BRANCHES—												
A.—Preliminary Ex- penses.	23,536	..	23,536	19,398	..	19,398	42,034	..	42,034			
B.—Land	5,59,680	..	5,59,680	2,54,332	..	2,54,332	8,14,212	..	8,14,212			
D.—Regulators	4,18,720	..	4,18,720	2,95,027	..	2,95,027	7,13,747	..	7,13,747			
E.—Falls and Weirs	7,74,038	..	7,74,038	3,97,909	..	3,97,909	11,72,847	..	11,72,847			
F.—(1).—Other Cross Drainage Works.	12,32,587	..	12,32,587	10,41,549	..	10,41,549	22,74,136	..	22,74,136			
G.—Bridges	7,63,893	21,940	8,05,833	4,79,302	10,597	4,89,946	12,63,255	32,527	12,95,782			
H.—Escapes	1,86,680	..	1,86,680	1,03,318	..	1,03,318	2,89,999	..	2,89,999			
I.—Navigation Works	17,47,254	..	17,47,254	3,84,346	..	3,84,346	21,31,600	..	21,31,600			
J.—Mills	41,513	..	41,513	..	..	..	41,513	..	41,513			
K.—Buildings	9,41,083	3,923	9,44,956	3,08,671	1,674	3,10,345	12,49,704	5,597	12,65,301			
L.—Earth-work	48,85,620	-1,996	48,82,824	31,61,614	..	31,61,614	80,47,434	-1,996	80,45,438			
M.—Plantations	1,20,812	..	1,20,812	1,04,358	..	1,04,358	2,25,170	..	2,25,170			
N.—Tanks and Reser- voirs.	1,040	..	1,040	..	..	..	1,040	..	1,040			
O.—Miscellaneous	87,897	..	87,897	77,387	..	77,387	1,65,284	..	1,65,284			
P.—Maintenance	2,27,821	..	2,27,821	2,09,075	..	2,09,075	4,36,800	..	4,36,800			
TOTAL	..	120,34,330	23,867	120,58,197	68,36,341	12,261	68,43,602	1,88,70,071	30,128	1,89,06,799		
3. DISTRIBUTABLES—												
A.—Preliminary Ex- penses.	61,908	..	61,908	30,471	..	30,471	91,370	..	91,370			
B.—Land	3,87,091	-555	3,86,536	72,601	..	72,601	4,50,692	-555	4,50,137			
C.—Works	14,08,001	..	14,08,001	7,95,007	..	7,95,007	22,03,003	..	22,03,003			
L.—Earth-work	16,57,946	..	16,57,946	0,77,792	..	0,77,792	20,35,738	..	20,35,738			
O.—Miscellaneous	2,55,485	..	2,55,485	17,803	..	17,803	2,73,288	..	2,73,288			
P.—Maintenance	..	..	..	..	..	..	..	..	..
TOTAL	..	37,60,431	-555	37,59,876	19,02,074	..	19,02,674	50,63,105	-555	50,62,550		

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Sirhind Canal Project.

No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OF ACCOUNT.	DIRECT CHARGES.										Cost of construction as now estimated. (Construction Estimate closed on 31st March.)	Expenditure against Estimates.
	IMPERIAL.			CONTRIBUTION.			TOTAL.					
	Previous.	1915-16.	Total.	Previous.	1915-16.	Total.	Previous.	1915-16.	Total.	Rs.	Rs.	Rs.
DRAINAGE AND PROTECTIVE WORKS.												
A.—Preliminary Expenses.	Rs. 51	Rs. ..	Rs. 31	Rs. 17	Rs. ..	Rs. 17	Rs. 48	Rs. ..	Rs. 48	Rs.	Rs.	Rs.
B.—Land	55,982	..	55,982	44,630	..	44,630	1,00,518	..	1,00,518			
C.—Works	3,303	..	3,303	1,858	..	1,858	5,161	..	5,161			
L.—Earth-work	6,31,372	..	6,31,372	4,24,032	..	4,24,032	9,55,464	..	9,55,464			
O.—Miscellaneous	..	..	..	..	..	..	..	..	..
P.—Maintenance	2,622	..	2,622	1,475	..	1,475	4,097	..	4,097			
TOTAL	5,01,310	..	5,01,310	4,71,078	..	4,71,078	10,65,298	..	10,65,298			
TOTAL I.—WORKS	1,74,07,215	96,895	1,75,01,613	97,48,287	63,372	97,48,287	2,71,53,502	1,40,170	2,73,03,272	2,75,07,251	2,71,18,425	
II.—ESTABLISHMENT.												
6. DIRECTION	..	—1,327										
6. EXECUTIVE												
7. MEDICAL	46,53,615	2,571	46,55,080	(a) 28,24,820	1,401	28,29,014	74,78,605	5,036	74,84,603			
8. SPECIAL SURVEY												
8. SPECIAL FIELD SURVEY.												
LEAVE AND PENSION ALLOWANCES.	..	..	..	5,30,203	657	5,30,050	5,30,203	657	5,30,050			
TOTAL	46,53,815	1,244	46,55,050	33,64,113	5,351	33,60,404	60,17,956	6,506	60,24,552	60,33,300	80,11,218	
III.—TOOLS AND PLANT.												
4. NAVIGATION PLANT												
2. PLANT AND MATERIALS.	21,01,050	..	21,05,210	11,90,791	..	11,90,022	32,05,780	369	32,06,188			
8. MISCELLANEOUS												
REPAIRS AND CARRIAGE		227			131							
LOSS BY EXCHANGE	..	2,740	..	2,710	10,568	..	10,564	13,703	..	13,309		
TOTAL	21,07,720	227	21,07,957	12,01,350	131	12,01,100	33,00,058	358	33,00,416	33,11,370	33,08,434	
IV.—SUSPENSE ACCOUNT.												
STOCK	..	2,00,707	—21,073	1,85,621	..	..	..	2,00,797	—21,973	1,85,821		
14. STOCK PURCHASES	..	—40	—137	—180	..	..	..	—19	—137	—180		
15a Stock Sales	..	107	—52	55	..	..	..	107	—52	55		
10. MISCELLANEOUS ADVANCES.	981	207	1,178	..	..	..	..	981	207	1,178		
17. LONDON INVOICES	..	..	..	..	..	..	..	..	..	..
18. LONDON STORES	12,034	—12,034	..	..	..	..	..	12,034	—12,034	..		
TOTAL	2,10,976	—83,990	1,95,971	..	..	..	2,10,870	—33,800	1,85,871			
GRAND TOTAL	2,43,98,650	63,070	2,41,62,029	1,43,11,751	68,854	1,43,70,613	3,87,00,418	1,22,824	3,86,23,212	3,80,71,921	3,81,93,077	
V.—LESS RECEIPTS ON CAPITAL ACCOUNT.	1,07,518	..	1,07,518	68,008	..	68,008	1,76,126	..	1,76,126	1,76,126	1,76,126	
Net Total	3,42,81,141	63,970	2,43,45,111	1,42,43,161	68,854	1,43,02,006	3,86,24,302	1,22,521	3,86,47,110	3,87,05,790	3,82,90,951	
APPORTIONMENT.												
49.—IRRIGATION WORKS	2,42,81,141	63,970	2,43,45,111	1,42,43,161	68,854	1,43,02,006	3,86,24,302	1,22,524	3,86,47,110	3,87,05,790	3,82,90,951	
43.—M. W. AND NAVIGATION, IMPERIAL PROVINCIAL												

(a) Share of accounts excluded from 1912-13.

IRRIGATION BRANCH.

OFFICE OF ACCOUNTANT-GENERAL.

PUNJAB PROVINCE.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Sirhind Canal Project.

No. 5.—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

Receipts.	Interest			Contribution			Total.		
	Previous	1915-16	Total	Previous	1915-16	Total	Previous	1915-16	Total
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Occupied rates ..	6,00,15,617	23,60,524	63,60,641	1,714	9,271	10,985	7,74,10,231	25,10,571	8,68,37,709
Sales of water ..	2,63,521	22,41	2,63,542	14,540	...	14,540	2,62,771	22,141	4,05,110
Supply of towns ..	700	45	700	...	...	...	700	45	700
Receipts from Plants ..	4,62,221	26,571	6,27,792	1,02,441	12,72	2,00,171	2,01,771	41,507	6,31,073
Receipts from Civil Canal Fund ..	1,53,171	—	1,53,171	1,12,921	...	1,12,921	2,52,441	—	2,52,441
Water power ..	17,731	1,17,571	18,90,301	1,11,411	49,712	83,471	21,51,511	1,73,301	23,21,503
Interest on Receipts ..	87,171	11,71	98,881	97,771	6,11	1,771	97,471	15,371	93,828
Revolving Fund ..	1,77,411	1,771	1,80,181	4,771	1,771	4,771	1,77,451	7,411	1,85,224
Fines ..	31,711	—	31,711	31,711	...	31,711	42,211	—	42,211
Miscellaneous & Letter Books ..	11,251	1,41	12,66,261	21,611	5,41	27,021	11,71,411	1,45,531	13,20,013
TOTAL ..	74,72,521	21,7,521	96,40,042	19,94,721	3,771	10,84,11	71,74,521	22,10,571	9,68,37,709
Share of Head Projector P.M.C. in the Civil Canal Fund ..	17,611	1,761	19,371	—	—	—	17,611	82,211	99,824
Interest on Revolving Fund ..	—	—	—	—	—	—	—	—	—
TOTAL RECEIPTS ..	74,55,721	20,9,61	95,45,332	19,84,321	8,571	10,83,101	71,81,721	22,08,531	9,62,823

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Sirhind Canal Project.

No. 3.—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

CHARGES.	IMPERIAL.			CONTRIBUTION.			TOTAL.		
	Previous.	1915-16.		Previous.	1915-16.		Previous.	1915-16.	
		1915.	Total.		1915.	Total.		1915.	Total.
(I.A.)—EXTENSIONS AND IMPROVEMENTS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(1)—HEAD WORKS	1,56,010	35,421	1,02,731	88,103	10,924 (a)	1,08,027	2,46,013	55,345	3,00,358
(2)—MAIN CANAL AND BRANCHES	9,50,910	60,651	10,11,591	10,05,380	1,49,360	18,14,740	26,10,326	2,10,011	28,26,337
(3)—DISTRIBUTARIES	6,46,000	38,000	6,81,990	14,262	..	11,262	6,01,102	38,000	0,00,352
(4)—DRAINAGE AND PROTECTIVE WORKS	41,031	216	41,286	20,377	76	20,452	61,411	321	61,732
TOTAL I. A.	17,95,784	1,34,408	10,30,102	17,55,124	1,09,339	19,57,487	35,83,912	3,03,707	38,87,670
(I.B.)—MAINTENANCE AND REPAIRS.									
(1)—HEAD WORKS	7,30,601	28,410	7,60,011	4,06,426	15,081	4,92,406	11,37,026	44,301	11,81,417
(2)—MAIN CANAL AND BRANCHES	36,05,800	1,53,977	38,50,870	21,74,780	80,400	23,01,246	60,90,095	2,40,437	63,21,122
(3)—DISTRIBUTARIES	42,18,000	1,01,988	43,22,994	366	..	366	42,18,372	1,04,066	43,83,360
(4)—DRAINAGE WORKS	4,30,332	71,988	5,02,320	2,73,212	40,403	3,13,706	7,03,544	1,12,161	8,10,025
TOTAL I. B.	91,81,838	4,10,303	90,04,201	20,51,780	1,42,934	30,97,723	1,21,39,827	5,02,207	1,27,01,924
(I.C.) COMPENSATION	36,196	10	30,211	13,413	4	13,447	48,038	20	48,668
(II)—ESTABLISHMENT.									
(5)—Direction and Account	10,72,086	60,700	11,22,681	3,20,410	20,273	3,46,083	13,08,495	71,072	14,60,567
(6)—Executive Establishment	44,01,140	2,03,765	40,08,001	17,09,073	81,889	17,01,682	61,14,119	3,46,644	04,00,763
(7)—Medical Do.	1,55,130	(b) 11,405	1,60,625	51,875	2,935	54,810	2,10,005	14,430	2,24,435
(7A)—REVENUE Do.	60,10,773	2,47,227	62,68,000	0,00	000	10,610	50,20,303	2,48,217	52,08,410
(7B)—NAVIGATION Do.	20,616	314	20,930	..	..	..	20,610	314	20,930
(7D)—LEAVE AND PENSION ALLOWANCE, (14 PER CENT, ON Rs. 77,208.)	..	..	..	2,01,627	14,852	3,09,371	2,94,527	14,852	3,09,370
TOTAL	1,06,65,750	6,74,580	1,12,40,340	23,92,405	1,20,030	25,13,344	1,30,38,165	6,05,629	1,37,53,684
(III)—TOOLS AND PLANT.									
(1)—SCIENTIFIC INSTRUMENTS DRAWING MATERIALS .....	..	1,717	1,717	..	510	540	..	2,263	2,263
(2)—PLANT AND MACHINERY .....	..	160	160	..	81	84	..	234	234
(3)—TOOLS .....	..	4,630	4,030	..	1,405	1,405	..	0,036	6,035
(4)—NAVIGATION PLANT .....	..	4,909	100	4,709	2,351	50	2,40,	0,960	7,116
(5)—CAMP EQUIPAGE .....	..	1,525	0,080	10,000	3,738	5,108	5,203	11,188	19,461
(6)—MISCELLANEOUS	3,00,046	1,263	3,10,403	1,02,905	—304	1,02,611	4,11,061	965	4,12,920
(7)—OFFICE FURNITURE .....	..	1,935	1,935	..	086	086	..	2,021	2,021
(8)—RETAINS AND CARRIAGE	1,24,761	10,613	1,35,204	55,062	4,983	60,640	1,80,413	16,496	1,95,809
TOTAL	4,30,031	20,488	4,60,416	1,04,056	12,774	1,77,130	6,04,587	42,262	6,40,849
(IV)—REFUNDS OF REVENUE	78,122	741	78,807	2,630	57	2,506	80,062	601	81,483
(V)—PROFIT AND LOSS	372	..	372	85	..	86	457	..	457
(VI)—SUSPENSE ACCOUNT									
MISCELLANEOUS ADVANCES .....	..	..	..	680	1,547	2,227	680	1,547	2,227
Stock .....	..	..	..	13,892	640	14,484	13,842	640	14,488
,, PURCHASE .....	..	..	..	..	30	30	..	30	30
TOTAL SUSPENSE ACCOUNT .....	..	..	..	..	—48	—48	..	—48	—48
TOTAL	2,22,00,000	11,58,630	2,33,59,000	73,30,567	4,18,212	77,78,800	2,05,31,650	16,06,851	3,11,38,111
Indirect Charges debitable to Revenue Account as per Account No. 5 .....	..	14,00,074	80,003	15,80,067	..	..	14,00,074	80,003	15,80,067
TOTAL CHARGES	2,37,00,007	12,39,602	2,40,39,000	73,30,567	4,48,242	77,78,800	3,10,30,031	16,67,344	8,27,18,478
Balancce Not Revenue	4,05,87,182	10,68,482	4,68,75,004	60,26,030	3,67,670	63,03,701	4,09,01,143	16,20,812	4,21,81,055
GRAND TOTAL	7,06,87,249	32,28,081	7,38,15,393	13,01,528	80,672	13,85,100	7,18,01,777	33,08,650	7,52,00,133

(a). Includes reigonrage amounting to Rs. 1,30,314 during the year and up to date Rs.

(b). Includes Rs. 91,092 on account of fees for collection of Revenue.

(c). Share of account under Imperial excluded from 1912-13.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Sirhind Canal Project.

No. 4.—INTEREST ACCOUNT FOR AND TO END OF 1915-16.

	Amount. Rs.		Amount. Rs.
Total Interest charges to end of 1914-15 ..	3,20,05,762	Net Revenue realized to end of 1914-15 ..	4,68,87,182
Do. for the year 1915-16 ..		Do. during 1915-16 ..	10,88,482
Total outlay to end of March 1916 = 2,43,43,111			
Less half outlay during 1915-16 = 31,986			
Mean capital at charge = 2,43,13,126			
Interest at 3.4725%	8,44,373		
TOTAL / ..	3,31,40,035		
Balance Revenue after defraying Interest charges	1,67,35,020		
TOTAL ..	4,88,75,064	TOTAL ..	4,88,75,664

No. 5.—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

Particulars.	Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.
CAPITAL—			
Capitalization of abatement of Land Revenue	3,20,099	.. ..	3,20,099
Leave and Pension Allowances .. { Imperial	8,91,174	174	8,91,348
Contribution	5,39,293	657	5,39,950
Total	17,50,566	831	17,51,397
Deduct Leave and Pension allowances debited to Native States treated as direct charges and transferred to Account No. 2 of the canal.	5,39,293	657	5,39,950
Net debitible to Imperial Canal	12,11,273	174	12,11,447
REVENUE—			
Capitalization of abatement of Land Revenue	5,873	550	6,423
Leave and Pension Allowances .. { Imperial	14,93,201	80,443	15,73,644
Contribution	2,94,527	14,852	3,09,379
Total	17,93,601	95,345	18,89,446
Deduct Leave and Pension allowances debited to Native States treated as direct charges and transferred to Account No. 3 of the canal.	2,94,527	14,852	3,09,379
Net Imperial Revenue	14,99,074	80,993	15,80,067

IRRIGATION BRANCH.

PUNJAB PROVINCE,

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Sirhind Canal Project.

No 6.—STATEMENT COMPARING CHARGES TO DATE WITH SANCTIONED ESTIMATE.

PARTICULARS.	CHARGES AGAINST CLOSING SANCTION.			CURRENT SANCTION.			Total charges to date against old and current sanctions.	REMARKS.
	Expenditure against Construction Estimate.	Expenditure against open canal sanctions.	Total.	Charges to date.	Amount of Sanctioned Estimate.	Unspent Balance of Estimate.		
1	2	3	4	5	6	7	8	9
IMPERIAL.								
DIRECT CHARGES—								
Works ..	1,20,30,673	17,37,000	1,37,71,673	1,32,616	3,14,461	2,12,421	1,76,03,613	G. I. 827 I = (a) 27-5-14 = 28,122
Establishment ..	42,71,561	3,76,761	46,48,512	6,471	29,607	23,126	46,53,080	G. I. 995 I = (a) 6-7-14 = 11,459
Tools and Plant ..	20,54,551	24,298	21,07,112	613	2,080	1,973	21,07,066	G. I. 370 I = (a) 15-4-16 = 34,484
Suspense Balances ..	...	...	...	1,55,971	...	-1,55,971	1,85,971	L. G. 2095 W.L. = 15,797 D-10-15. G. I. 14 I = (a) 5-1-14 = 1,63,675 G. I. 501 I = 71,037 14-3-14
Total ..	2,19,86,831	21,38,953	2,41,27,334	3,25,295	3,70,444	51,140	2,34,52,029	3,76,444
Less Receipts on Capital Account.	1,07,518	...	1,07,518	...	...	...	1,07,518	
Net Total ..	2,16,80,313	21,38,953	2,40,19,816	3,25,295	3,70,444	51,140	2,43,45,111	(a). 84 per cent. of total estimated amount.
INDIRECT CHARGES—								
Capitalized Abatement of Land Revenue.	3,15,270	4,820	3,20,090	...	...	...	3,20,090	
Leave and Pension Allowances.	6,37,601	62,749	8,00,443	902	...	-902	8,01,348	
Total ..	11,52,871	57,569	12,10,442	90	...	-90	12,11,447	
GRAND TOTAL ..	2,30,33,630	21,38,953	2,52,30,583	3,26,20	3,76,451	50,241	2,55,56,778	
CONTRIBUTION.								
DIRECT CHARGES—								
Works ..	93,00,021	3,72,927	97,41,952	57,807	1,10,765	91,558	97,09,659	G. I. 827 I = (a) 27-5-14 = 50,132
Establishment ..	32,56,004	65,036	33,62,00	6,83	12,185	5,321	33,69,461	G. I. 995 I = (a) 6-7-14 = 6,446
Tools and Plant ..	11,95,963	5,311	12,01,29	306	870	0-1	12,01,400	G. I. 370 I = (a) 15-4-16 = 10,381
Suspense Balances ..	...	...	...	...	...	...	...	G. I. 14 I = (a) 5-1-14 = 66,442
Total ..	1,35,51,000	4,74,134	1,43,00,763	64,576	1,02,400	97,530	1,43,70,613	1,62,400
Less Receipts on Capital Amount.	68,693	16	68,693	...	...	...	68,693	
Net Total ..	1,37,63,016	4,74,118	1,42,37,136	61,876	1,02,400	97,530	1,43,02,005	(a). 86 per cent. of total estimated amount.
GRAND TOTAL ..	1,37,63,016	4,74,118	1,42,37,136	61,976	1,02,400	97,630	1,43,02,005	

IRRIGATION BRANCH.

OFFICE OF ACCOUNTANT-GENERAL.

PUNJAB PROVINCE.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Lower Chenab Canal Project.

No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OF ACCOUNT.	DIRECT CHARGES.			Cost of construction as now estimated. Construction Estimate closed on 31st March	Expenditure against closed Estimates.		
	Imperial.						
	Previous.	1915-16.	Total.				
I.—WORKS.	Rs.	Rs.	Rs.	Rs.	Rs.		
1. HEAD WORKS—							
A.—Preliminary Expenses	... .. ..	5,710 ..	5,710 ..			
B.—Land	... .. ..	64,105 ..	64,105 ..			
C.—Works	... .. ..	50,47,022 ..	50,47,022 ..			
K.—Buildings	... .. ..	90,633 4,703	1,01,128 ..			
O.—Miscellaneous	... .. ..	6,084 ..	6,084 ..			
P.—Maintenance	... .. ..	1,68,784 ..	1,68,784 ..			
	Total	58,98,938 ..	4,795 ..	53,93,733 ..			
2. MAIN CANAL AND BRANCHES—							
A.—Preliminary Expenses	.. .. ..	1,20,369 ..	1,20,369 ..			
B.—Land	.. .. ..	2,15,279 ..	2,15,279 ..			
D.—Regulators	.. .. ..	10,83,702 657	10,84,449 ..			
E.—Falls and Weirs	.. .. ..	6,03,480 12,804	6,18,284 ..			
F. (1).—Other Cross Drainage Works	.. .. ..	6,67,002 ..	6,67,002 ..			
G.—Bridges	.. .. ..	10,60,601 16	10,60,601 ..			
H.—Escapes	.. .. ..	5,39,583 3,730	5,42,313 ..			
J.—Mills	.. .. ..	73,020 ..	73,020 ..			
K.—Buildings	.. .. ..	16,84,909 10,493	17,04,403 ..			
L.—Earth-work	.. .. ..	74,81,467 41,269	75,22,756 ..			
M.—Plantations	.. .. ..	1,39,734 ..	1,39,734 ..			
O.—Miscellaneous	.. .. ..	3,70,358 55,483	4,24,841 ..			
P.—Maintenance	.. .. ..	1,05,017 ..	1,05,047 ..			
	Total	1,41,50,651 ..	1,33,459 ..	1,43,14,108 ..			
3. DISTRIBUTORIES—							
A.—Preliminary Expenses	.. .. ..	1,34,335 313	1,34,608 ..			
B.—Land	.. .. ..	1,17,868 ..	1,17,868 ..			
C.—Works	.. .. ..	17,75,559 1,242	17,70,881 ..			
L.—Earth-work	.. .. ..	26,60,156 5,760	26,65,926 ..			
O.—Miscellaneous	.. .. ..	4,75,024 597	4,76,221 ..			
P.—Maintenance	.. .. ..	34,570 ..	34,570 ..			
	Total	51,96,162 ..	7,921 ..	52,06,083 ..			

IRRIGATION BRANCH.

PUNJAB PROVINCE,

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Lower Chenab Canal Project.

No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OF ACCOUNT.	DIRECT CHARGES.			Cost of construction as now estimated (Construction Estimate closed on 31st March 1900.)	Expenditure against closed Estimates.		
	Imperial.						
	Previous.	1915-16.	Total.				
4. DRAINAGE AND PROTECTIVE WORKS—							
<i>A.—Preliminary Expenses</i>	10,771	..	10,771				
<i>B.—Land</i>	14,563	10,039	24,602				
<i>C.—Works</i>	24,803	13,468	38,271				
<i>D.—Earth-work</i>	1,46,759	29,128	1,75,880				
<i>E.—Miscellaneous</i>	37,176	237	37,413				
<i>F.—Maintenance</i>	1,162	..	1,162				
TOTAL	2,44,233	52,872	2,97,105				
TOTAL I.—WORKS	2,50,11,931	1,09,012	2,52,11,026	2,55,03,142	2,44,70,715		
II.—ESTABLISHMENT							
DIRECTION	(a) 12,1,911	6,714	12,26,625				
G. EXECUTIVE	31,16,704	22,513	34,39,307				
7. MEDICAL	62,175	..	62,175				
8. SPECIAL SURVEY							
8½. SPECIAL FIELD SURVEY							
9. LEAVES AND PENSION ALLOWANCES							
TOTAL	40,98,780	26,227	47,27,007	47,07,839	46,05,073		
III.—TOOLS AND PLANT.							
9. NAVIGATION PLANT							
10. MILL PLANT							
11. RAILWAY PLANT AND ROLLING STOCK	15,000	..	15,000				
12. MISCELLANEOUS	5,13,989	1,987	5,15,976				
13. REPAIRS AND CARRIAGE	1,02,328	..	1,02,328				
Loss by Exchange							
TOTAL	6,31,317	-1,087	6,33,304	7,18,225	6,38,648		
IV.—SUSPENSE ACCOUNT.							
14. STOCK	6,28,554	-1,24,076	6,03,378				
15. STOCK PURCHASES	-18,114	-16,671	-31,785				
16. STOCK SALES	761	3,091	3,848				
16. MISCELLANEOUS ADVANCES	1,237	2,007	3,241				
17. LONDON INVOICES							
18. LONDON STORES							
TOTAL	6,12,151	-1,30,460	4,75,965				
GRAND TOTAL	3,00,51,632	92,770	3,10,47,302	3,10,78,606	2,87,16,236		
V.—LESS RECEIPTS ON CAPITAL ACCOUNT.							
14,403	..	14,403	14,403	14,403	14,403		
NET TOTAL	3,00,40,129	92,770	3,10,32,890	3,10,65,103	2,87,00,83		
APPORTIONMENT.							
49.—IRRIGATION WORKS	3,00,25,710	92,770	3,10,18,489				
48.—M. W. AND NAVIGATION, IMPERIAL	14,410	..	14,410				

(a). Excludes share of accounts commencing from 1912-13.

IRRIGATION BRANCH. PUNJAB PROVINCE,
OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16

Lower Chenab Canal Project.

No. 3—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS.	IMPERIAL			CHARGES.	IMPERIAL		
	Previous.	1915-16.	Total.		Previous.	1915-16.	Total.
Occupiers' rates ..	Rs. 11,45,15,592	Rs. 83,55,423	Rs. 12,29,04,017	I A.—EXTENSIONS AND IMPROVEMENTS	Rs. 7,51,902	Rs. 7,35,274	Rs. 14,86,476
Owners' rates on irrigated land.	53,31,411	2,417	55,13,828	1.—HEAD WORKS ..	11,37,975	74,454	12,12,429
Sales of water ..	2,35,180	24,216	2,59,405	2.—MAIN CANAL AND BRANCHES,	12,09,511	113,065	13,22,566
Supply of Towns ..	8,201	5,186	13,477	3.—DISTRIBUTARIES ..	67,517	57,726	1,25,272
Receipts from plantations ..	1,47,547	22,232	1,69,779	4.—DRAINAGE AND PROTECTIVE WORKS.	31,60,235	9,80,608	41,48,743
Receipts from other Canal produce ..	80,677	461	81,038	TOTAL I.A. ..			
Water power ..	2,53,558	15,059	2,68,617	I B.—MAINTENANCE AND REPAIRS.			
Rent of Buildings ..	1,97,169	11,540	2,08,709	1.—HEAD WORKS ..	16,90,363	1,16,064	17,07,347
Fines ..	30,667	1,217	31,014	2.—MAIN CANAL AND BRANCHES,	76,41,143	6,02,575	84,43,718
Miscellaneous and other Receipts ..	6,12,637	7,724	4,19,761	3.—DISTRIBUTARIES ..	41,35,316	2,60,441	43,65,753
Total ..	12,17,22,920	81,16,507	13,01,70,546	4.—DRAINAGE WORKS ..	50,503	15,967	66,470
Share of Land Revenue collected in the Civil Department.	3,24,40,011	65,65,90	2,00,32,631	TOTAL I.B. ..	1,37,07,347	9,08,947	1,47,03,294
Interest on sale proceeds of waste lands benotized ..	51,17,001	6,01,930	50,18,651	I C.—COMPENSATION.	1,05,429	551	1,05,980
Total ..	3,75,00,602	74,73,18	4,50,41,682	II.—ESTABLISHMENT.			
TOTAL RECEIPTS ..	15,92,58,610	1,53,25,957	17,52,11,627	1.—DIRECTION AND ACCOUNTS.	11,39,256	78,341	12,17,597
				2.—EXECUTIVE ESTABLISHMENT.	62,08,933	4,65,670	66,72,662
				3.—MEDICAL ESTABLISHMENT.	3,38,231	23,436	3,56,667
				7 A.—REVENUE ESTABLISHMENT.	75,5,176	510,250	58,96,426
				TOTAL ..	1,52,54,646	10,36,697	1,93,41,343
				III.—TOOLS & PLANT.			
				1.—SCREWING INSTRUMENTS & DRAWING MATERIALS.	..	1,062	1,062
				2.—PLANT & MACHINERY.	..	2,303	2,303
				3.—TOOLS.	..	6,755	6,755
				4.—NAVIGATION PLANT.	..	513	513
				5.—CAMP EQUIPAG.	..	1,952	1,952
				6.—LIVE STOCK.	..	114	114
				7.—OFFICE FURNITURE.	..	2,028	2,028
				8.—MISCELLANEOUS.	4,68,411	5,720	4,66,131
				9.—REPAIR & CARRIAGE.	1,91,730	37,700	2,29,418
				10.—MIG. PLANT.	5,800	..	5,809
				11.—RAILWAY PLANT & ROLLING STOCK.	54,079	..	54,079
				TOTAL ..	7,11,008	56,152	7,70,160
				IV.—REFUNDS OF REVENUE.	1,17,007	747	1,17,754
				TOTAL ..	3,30,64,672	31,20,602	3,61,85,274
				Indirect charges debitable to Revenue Account as per Account No. 5.	21,38,874	1,62,136	22,91,012
				TOTAL CHARGES ..	3,82,03,546	32,72,710	3,54,76,286
				BALANCE, Net Revenue ...	12,40,65,091	1,26,60,347	13,67,35,411
				GRAND TOTAL ..	16,92,88,610	1,53,22,987	17,52,11,627

(a). Excludes share of accounts commencing from 1912-13.

(b). Includes Rs. 2,47,928 on account of Lombardians' fees for collection of Revenues.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTS-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16

Lower Chenab Canal Project.

No. 4.—INTEREST ACCOUNT FOR AND TO END OF 1915-16

	Amount.		Amount.
	Rs.		Rs.
Total Interest charges to end of 1914-15 ..	2,16,08,644	Net Revenue realised to end of 1914-15.	12,40,85,004
Do. for the year 1915-16.	10,76,007	Do. during 1915-16 ..	1,20,50,247
Total outlay to end of 31st March 1910 = 3,10,32,890			
Less half outlay during 1915-16 = 40,385			
Mean Capital at charge .. = 3,09,36,511			
Interest at per cent. ..	10,76,007		
Total ..	2,20,74,051		
Balance Revenue after defraying Interest charges ..	11,40,60,600		
Total ..	11,07,35,341	Total ..	13,07,35,341

No. 5.—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

	Particulars.			Previous.	1915-16.	Total.
CAPITAL—						
Capitalisation of abatement of Land Revenue	Rs. 1,02,219	Rs. ...	Rs. 1,02,219
Leave and Pension Allowances	6,57,710	9,062	6,61,602
			Total ..	7,50,000	9,062	7,63,681
REVENUE—						
Capitalization of abatement of Land Revenue	3,225	..	3,225
Leave and Pension Allowance,	21,35,640	1,52,138	22,87,778
			Total ..	21,39,874	1,52,138	22,91,012

No. 6.—STATEMENT COMPARING CHARGES TO DATE WITH SANCTIONED ESTIMATE.

PARTICULARS.	CHARGES AGAINST CLOSED SANCTIONS.			CURRENT SANCTIONS.			Total charges to date against old and current sanctions.	REMARKS.
	Expenditure against Construction Estimate.	Expenditure against open canal sanctions.	Total.	Charges to date.	Amount of sanction Estimate.	Unspent Balance of Estimate.		
DIRECT CHARGES—								
Works ..	1,00,23,203	45,47,513	2,44,70,716	7,40,311	11,22,727	3,92,416	2,52,11,026	G. I. 471. 10-11-15 = 4,03,153
Establishment ..	30,40,000	9,05,607	40,05,607	1,21,331	1,02,166	40,832	47,27,007	Do. 630 I. 8-1-13 = 1,76,732
Tools and Plant ..	5,02,825	40,023	6,38,848	—5,614	70,377	81,921	8,33,301	Do. 1079 I. 29-11-15 = 96,013
Suspense Balances ..	...	...	...	4,75,006	...	—4,75,006	4,75,006	Do. 524 I. 10-3-14 = 1,72,701
	Total ..	2,41,50,093	55,50,143	2,97,15,236	13,32,066	13,04,270	32,204	3,10,17,302
Less Receipts on Capital Account.	14,403	...	14,403	...	...	..	14,403	Do. 1200 I. 21-2-8-11 = 1,18,607
	Net Total ..	2,41,41,690	55,50,143	2,97,00,633	13,32,066	13,04,270	32,204	3,10,32,690
INDIRECT CHARGES—								
Capitalized abatement of Land Revenue.	02,060	0,810	1,01,869	350	...	—360	1,02,210	L.G. 018 W.L. 29-6-15 = 13,072
Leave and Pension Allowances.	5,09,400	1,35,185	6,44,875	16,067	...	—16,987	0,01,002	L.G. 01278 W.L. 16-9-15 = 11,103
	TOTAL ..	6,01,540	1,44,005	7,40,644	17,337	..	—17,337	L.G. 1098 W.L. 7-3-16 = 2,348
	GRAND TOTAL ..	2,47,43,230	57,04,138	3,04,47,377	13,40,103	13,04,270	24,807	G.I. 1110 I. 10-11-15 = 10,000
							3,17,00,780	Total .. 13,61,270

Assistant Accountant-General.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Upper Sutlej Inundation Canal Project.

No. (2).—CAPITAL ACCOUNT FOR AND TO END OF 1915-16

HEADS OF ACCOUNT.	DIRECT CHARGES.			Cost of Construction as now estimated (Construction Estimate closed on 31st March.)	Expenditure against closed Estimate.		
	Imperial.						
	Previous.	1915-16.	Total.				
	Rs.	Rs.	Rs.	Rs.	Rs.		
I.—WORKS.							
2. MAIN CANAL AND BRANCHES—							
A.—Preliminary Expenses	3,849	...	3,849	...	...
B.—Land	43,548	...	43,548	...	...
D.—Regulators	30,512	...	30,512	...	...
E.—Falls and Weirs	60,015	...	60,015	...	...
G.—Bridges	52,492	...	52,492	...	...
K.—Buildings	2,11,987	...	2,11,987	...	...
L.—Earth-work	5,52,555	9,215	5,52,555	...	...
O.—Miscellaneous	5,112	...	5,112	...	...
P.—Maintenance	2,457	...	2,157	...	...
TOTAL	9,70,927	9,215	9,80,142	...	...
3. DISTRIBUTARIES—							
A.—Preliminary Expenses	3,842	...	3,842	...	...
B.—Land	45,782	...	45,782	...	...
C.—Work	82,030	...	82,030	...	...
L.—Earth work	2,35,365	...	2,35,365	...	...
O.—Miscellaneous	22,011	...	22,011	...	...
P.—Maintenance	4,652	...	4,652	...	...
TOTAL	3,95,512	...	3,95,512	...	...
TOTAL I.—WORKS	13,66,430	9,215	13,75,645	13,70,377	13,56,615		
II.—ESTABLISHMENT.							
5. DIRECTION	51,547	341	51,888	...	...
6. EXECUTIVE	2,95,083	1,280	2,97,272	...	...
7. MEDICAL	2,953	...	2,953	...	...
TOTAL	2,93,483	1,630	2,95,113	2,95,894	2,92,003		
III.—TOOLS AND PLANT.							
8. MISCELLANEOUS REPAIRS AND CARRIAGE	21,452 114	114 ...	24,566 114	...	...
TOTAL	24,566	114	21,680	21,707	21,436		
IV.—SUSPENSE ACCOUNT.							
14. STOCK	21,626	354	21,982	...	...
15. STOCK-SALES	1	...	1	...	...
16. MISCELLANEOUS ADVANCES	60	11	80	...	...
TOTAL	21,698	365	22,063	...	~		
GRAND TOTAL	17,06,186	11,324	17,17,510	16,90,978	16,73,058		
V.—LESS RECEIPTS ON CAPITAL ACCOUNT	156	..	156	156	156		
NET TOTAL	17,06,030	11,324	17,17,354	16,90,822	16,72,900		
APPORTIONMENT.							
43. IRRIGATION WORKS	9,16,123	11,324	9,27,447	...	...
43. M. W. AND NAVIGATION, PROVINCIAL	7,80,907	...	7,89,907	...	...

(a) Share of accounts excluded from 1912-13

IRRIGATION BRANCH.

OFFICE OF ACCOUNTANT-GENERAL:

PUNJAB PROVINCE.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Upper Sutlej Inundation Canal Project.

No. 3—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS.	IMPERIAL.			CHARGES.	IMPERIAL.		
	Previous.	1915-16.	Total.		Previous.	1915-16.	Total.
			Rs.	Rs.			Rs.
Occupiers' rate ..	70,8216	4,60,002	81,12,112	I. A.—EXTENSIONS AND IMPROVEMENTS.	Rs.	Rs.	Rs.
Owners' rates on irrigated Land.	17,732	..	17,732	2. MAIN CANAL AND BRANCHES	4,06,215	14,308	4,20,553
Sales of water ..	3,030	9	3,030	3.—DISTRIBUTORIES	1,08,004	5,138	1,74,132
Receipts from Plantations	1,30,322	4,333	1,31,715	4.—DRAINAGE AND PROTECTIVE WORKS	1,158	..	1,158
Receipts from other Canal produce.	74,050	591	74,641	TOTAL I. A. ..	5,76,397	19,748	5,96,143
Rent of Buildings ..	4,512	1,117	5,629	I. B.—MAINTENANCE AND REPAIRS.	10,379	..	10,379
Fines ..	2,24,050	126	2,25,086	2.—MAIN CANAL AND BRANCHES.	45,02,039	1,75,601	47,08,593
Miscellaneous and other Receipts.	17,103	5,072	22,175	3.—DISTRIBUTORIES	8,44,720	31,503	8,70,220
Contribution ..	22,835	..	22,835	TOTAL I. B. ..	54,47,801	2,10,397	56,58,201
Total ..	81,33,782	4,70,140	80,12,022	I.C.—COMPENSATION	8,006	..	8,006
Share of Land Revenue collected in the Civil Department.	72,33,217	2,61,380	74,01,000	II.—ESTABLISHMENT.	(a) 6,92,415	12,026	6,95,341
Interest on sale-proceeds of waste lands benefited.	78,363	5,608	84,052	5.—DIRECTION AND ACCOUNT.	21,34,227	74,535	22,08,762
Total ..	73,11,681	2,67,057	75,78,738	6.—EXECUTIVE ESTABLISHMENT.	37,416	1,621	39,039
Total Receipts ..	1,57,45,363	7,10,107	1,61,01,500	7.—MEDICAL DO.	12,50,515	(b) 65,051	13,22,466
				TOTAL ..	41,10,575	1,55,033	42,65,608
				III.—TOOLS AND PLANT			
				1.—SCIENTIFIC INSTRUMENT	..	223	223
				3.—TOOLS	..	818	818
				4.—NAVIGATION PLANT	..	916	916
				5.—CAMP EQUIPMENT	..	40	40
				MISCELLANEOUS	40,414	—195	40,416
				6.—OFFICE FURNITURE	..	691	691
				7.—REPAIRS AND CARRIAGE	21,521	1,222	21,743
				TOTAL ..	71,954	2,828	74,082
				IV.—REFUNDS OF REVENUE.	25,500	94	25,504
				V.—PROFIT AND LOSS	370	..	370
				TOTAL ..	1,02,41,201	9,88,008	1,06,20,302
				Indirect Charges debitable to Revenue Account as per Account No. 5.	6,14,606	11,701	6,66,300
				TOTAL CHARGES ..	1,08,45,800	1,09,502	1,12,05,602
				Balance, Net Revenue ..	48,50,503	3,30,305	51,80,808
				GRAND TOTAL ..	1,57,15,963	7,16,107	1,61,01,500

(a). Share of accounts excluded from 1912-13.

(b). Includes Rs. 12,722 on account of fees for collection of Revenue.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Upper Sutlej ~~H~~undation Project.

No. 4.—INTEREST ACCOUNT FOR AND TO END OF 1915-16.

	Amount.		Amount.
Total interest charges to end of 1914-15 ..	Rs 21,07,093	Net Revenue realized to end of 1914-15 ..	Rs. 48,58,563
Do. for the year 1915-16 ..		Do. during 1915-16 ..	3,30,395
Total outlay to 31st March 1916 Ra. 17,17,354			
Less half outlay during 1915-16 " 6,062			
Mean capital at charge " 17,11,692			
Interest at 3.4725 per cent ..	59,438		
Total Interest charges ..	21,66,535		
Balance Revenue after defraying Interest charges	30,29,427		
Total ..	51,95,968	Total ..	51,95,968

No. 5.—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

Particulars.	Previous.	1915-16.	Total.
CAPITAL—			
Capitalization of abatement of Land Revenue	Rs. 57,933	Rs. 50	Rs. 58,083
Leave and Pension Allowances ..	42,700	228	42,904
Total ..	1,00,743	278	1,01,027
REVENUE—			
Capitalization abatement of Land Revenue	10,448	..	10,648
Leave and Pension Allowances ..	6,33,048	21,704	6,55,652
Total ..	644,596	21,704	666,300

No. 6.—STATEMENT COMPARING CHARGES TO DATE WITH SANCTIONED ESTIMATE.

PARTICULARS.	CHARGES AGAINST CLOSED SANCTIONS.			CURRENT SANCTIONS.			Total charges to date against old and current sanctions.	Authority.	No. & Date.	Remarks.
	Expenditure against Constitution Estimate,	Expenditure against open canal sanctions.	Total.	Charges to date.	Amount of Sanctioned Estimate.	Unspent Balance of Estimate.				
DIRECT CHARGES—	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.			Rs.
Works ..	10,07,761	3,48,854	13,56,615	19,039	10,762	723	13,75,664	W. L. 0065 dated 6-8-14		3,140
Establishment ..	2,24,760	67,246	2,92,006	3,108	3,869	781	2,95,113			
Tools and Plant ..	20,068	4,365	24,433	249	271	27	24,680	W. I. 0205 dated 8-6-15		2,858
Suspense Balances ..	1.	..	22,003		—22,003	22,003				
Total ..	12,52,588	4,20,468	16,72,056	44,454	23,022	—20,632	17,17,510			
Less Receipts on Capital Account.	156	..	156	...	...	...	156	W. I. 056 dated 7-7-15		2,858
Net Total ..	12,52,432	4,20,468	16,72,000	44,454	23,022	—20,632	17,17,354			
INDIRECT CHARGES—								Secretary to Government, Punjab, P. W. D., Irrigation Branch.		
Capitalized abatement of Land Revenue.	53,691	4,352	58,033	...	..	..	58,033			
Leave and Pension Allowances.	33,148	9,411	42,559	435	..	—435	42,994			
Total ..	86,829	13,763	100,602	435	..	—435	101,027			23,922
GRAND TOTAL ..	13,39,261	4,34,231	17,73,492	44,890	23,022	—20,967	18,18,381			23,922

IRRIGATION BRANCH.

OFFICE OF ACCOUNTANT-GENERAL.

PUNJAB PROVINCE.

ADMINISTRATIVE ACCOUNTS FOR 1915-16.

Sidhnai Canal Project.

No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16:

HEAD OF ACCOUNT	DIRECT CHARGES.			Cost of construction as now estimated (Construction Estimate closed on 31st March 1915).	Expenditure against closed ¹ Estimates.		
	Imperial.						
	Previous.	1915-16.	Total.				
I.—WORKS.	Rs.	Rs.	Rs.	Rs.	Rs.		
1. HEAD WORKS—							
A.—Preliminary Expenses	754	..	754				
B.—Land	235	..	235				
C.—Works	2,46,260	..	2,46,260				
K.—Buildings	11,646	..	11,646				
O.—Miscellaneous	301	..	301				
	TOTAL	2,50,290	2,50,290				
2. MAIN CANAL AND BRANCHES—							
A.—Preliminary Expenses	4,014	..	4,014				
B.—Land	22,422	..	22,422				
D.—Regulators	49,568	..	49,568				
G.—Bridges	41,980	..	41,980				
K.—Buildings	60,780	..	60,780				
L.—Earth-work	2,58,906	..	2,58,906				
M.—Plantations	821	..	821				
O.—Miscellaneous	427	..	427				
P.—Maintenance	5,394	..	5,394				
	TOTAL	4,07,411	4,07,411				
3. DISTRIBUTORIES—							
A.—Preliminary Expenses	3,905	..	3,905				
B.—Land	11,367	..	11,367				
C.—Works	66,622	..	66,622				
L.—Earth-work	1,36,784	..	1,36,784				
O.—Miscellaneous	105	..	105				
	TOTAL	2,18,923	2,18,923				

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR 1915-16.

Sidhu Canal Project.

No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEAD OF ACCOUNT.	DIRECT CHARGES.			Cost of construction as now estimated (Construction Estimate closed on 31st March 1915).	Expenditure against closed Estimates.		
	Imperial.						
	Previous.	1915-16.	Total.				
	Rs.	Rs.	Rs.	Rs.	Rs.		
4. DRAINAGE AND PROTECTIVE WORKS—							
4.—Preliminary Expenses	..	..	36	..	36
TOTAL	..	..	36	..	36
TOTAL L.—WORKS	..	9,45,656	..	9,45,656	9,45,656		
II.—ESTABLISHMENT.							
5. DIRECTION .. .. ..	..	40,445 (a)	..	40,445 (a)		
6. EXECUTIVE .. .. ..	..	2,14,741	..	2,14,741		
7. MEDICAL .. .. ..	..	..	..	..	..
TOTAL	..	2,64,186	..	2,64,186	2,64,186		
III.—TOOLS AND PLANT							
12.—MISCELLANEOUS .. .. ..	..	38,039	..	38,039		
13.—REPAIRS AND CARRIAGE .. .. ..	..	..	..	..	..
TOTAL	..	38,039	..	38,039	38,039		
IV.—SUSPENSE ACCOUNT.							
14. STOCK PURCHASES .. .. ..	..	—28	—74	—102		
15a. STOCK SALES .. .. ..	..	50	—15	35		
16. MISCELLANEOUS ADVANCES .. .. ..	..	92	94	186		
17. STOCK .. .. ..	..	43,039	—971	42,068		
TOTAL	..	44,053	—966	43,057			
GRAND TOTAL	..	12,91,934	—966	12,90,968	12,47,881		
V.—LESS RECEIPTS ON CAPITAL ACCOUNT	224	..	..	224	224
NET TOTAL	..	12,91,710	—966	12,90,744	12,47,057		
APPORTIONMENT.							
49.—IRRIGATION WORKS .. .. ..	..	12,73,401	—966	12,72,438		
43.—M. W. AND NAVIGATION, IMPERIAL PROVINCIAL	..	18,306	..	18,306			

(a), Excluding share of accounts commencing from 1912-13.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Sidhnai Canal Project.

No. 8.—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS.	IMPERIAL.			CHARGES.	IMPERIAL.		
	Previous.	1915. 16.	Total.		Previous.	1915. 16.	Total.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
Occupiers' rates	81,13,910	6,10,680	90,30,600	I.A.—EXTENSIONS AND IMPROVEMENTS.			
				1.—HEAD WORKS	27,091	2,300	29,400
				2.—MAIN CANAL AND BRANCHES.	1,68,960	4,442	1,72,502
				3.—DISTRIBUTARIES	72,003	3,708	75,711
Sales of water	38,853	3,778	42,631	4.—DRAINAGE AND PROTECTIVE WORKS.	508	...	508
				TOTAL I. A. ...	2,67,665	10,510	2,78,181
Receipts from Plantations	5,340	330	5,720	I.B.—MAINTENANCE AND REPAIRS.			
				1.—HEAD WORKS	3,23,801	7,507	3,31,308
				2.—MAIN CANAL AND BRANCHES.	8,74,760	22,400	8,98,200
Receipts from other Canal produce.	8,600	277	8,780	3.—DISTRIBUTARIES	5,06,455	12,056	5,18,511
				TOTAL I. B. ...	17,05,026	43,962	17,48,087
Rent of Buildings	18,483	251	18,735	I.C.—COMPENSATION	231	..	231
				II.—ESTABLISHMENT.			
				5.—DIRECTION AND ACCOUNT.	1,40,204	(a) 5,183	1,45,477
Fines	6,700	621	7,321	6.—EXECUTIVE ESTABLISHMENT.	7,40,110	37,479	7,86,560
				7.—MEDICAL ESTABLISHMENT.	15,928	1,470	17,107
Miscellaneous and other Receipts.	11,688	1,803	13,691	7 A.—REVENUE ESTABLISHMENT.	5,65,733	(b) 35,003	6,00,737
				TOTAL ...	11,71,065	70,145	11,71,210
				III.—TOOLS AND PLANT			
				1.—SCIENTIFIC AND DRAWING MATERIALS.	..	298	298
				2.—PLANT AND MACHINERY	..	218	218
Total	65,03,600	6,23,400	61,27,190	3.—TOOLS	..	..	..
				4.—NAVIGATION PLANT	..	401	401
Share of Land Revenue collected in the Civil Department.	14,50,051	1,88,524	16,18,175	5.—CAMP EQUIPAGE	..	..	..
				6.—LIVE STOCK	..	..	..
Interest on sale-proceeds of waste lands benefited.	3,00,060	20,805	3,21,761	7.—OFFICE FURNITURE	..	260	280
				8.—REPAIRS AND CARRIAGE	28,863	1,200	30,162
				12.—MISCELLANEOUS	21,630	205	21,844
				TOTAL ...	50,400	2,764	53,263
Total	17,30,010	2,00,329	19,40,239	IV.—REFUNDS OF REVENUE.	1,240	350	1,596
				C. S. A. L. ...	31,95,731	1,35,837	30,31,568
				Indirect Charges debitable to Revenue Account as per Account No. 5.	2,06,200	11,105	2,17,311
				TOTAL CHARGES ...	37,01,910	1,46,042	38,48,982
TOTAL RECEIPTS	1,02,34,096	8,33,120	1,10,07,735	Balance Net Revenue ...	65,32,660	6,80,187	72,18,853
				GRAND TOTAL ...	1,02,34,096	8,33,120	1,10,07,735

(a). Share of Accounts excluded from 1912-13.

(b). Includes Rs. 6,800 on account of fees for collection of Revenue.

IRRIGATION BRANCH. PUNJAB PROVINCE.
OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Sidhnai Canal Project.

No. 4.—INTEREST ACCOUNT FOR AND TO END OF 1915-16.

	Amount		Amount
	Rs.		Rs.
Total Interest charges to end of 1914-15 ..	12,10,493	Not Revenue realized to end of 1914-15 ..	65,32,666
Do. for the year 1915-16 ..	...	Do. during 1915-16 ..	6,80,187
Total outlay up to 31st March 1915 = Rs. 12,00,744	...		
Less half outlay during 1915-16 = " 483			
Mean Capital at charge = " 12,01,227			
Interest at 3.4725 per cent. ...	44,936		
Total ..	12,85,333		
Balance Revenue after defraying Interest charges ..	60,33,620		
Total ..	72,18,853	Total ..	72,18,853

No. 5.—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

PARTICULARS.					Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.	Rs.			
CAPITAL—							
Capitalization of abatement of Land Revenue	3,328	...	3,328
Leave and Pension Allowances	36,884	...	36,884
			Total ..	..	40,217	...	40,217
REVENUE—							
Capitalization abatement of Land Revenue	260	28	285
Leave and Pension Allowances	2,05,040	11,050	2,17,090
			Total ..	..	2,06,200	11,105	2,17,314
			GRAND TOTAL ..	..	2,46,420	11,105	2,57,531

No. 6.—STATEMENT COMPARING CHARGES TO DATE WITH SANCTIONED ESTIMATE.

PARTICULARS.	CHARGES AGAINST CLOSED SANCTION.			CURRENT SANCTIONS.			Total charges to date against old and current sanctions.	REMARKS.
	Expenditure against Construction Estimate.	Expenditure against open canal sanctions.	Total.	Charged to date.	Amount of Sanctioned Estimate.	Unspent Balance of Estimate.		
DIRECT CHARGES—								
Works ...	7,01,201	2,44,452	9,45,653	...	...	...	9,45,653	
Establishment ..	2,04,503	59,683	2,64,186	...	...	...	2,64,186	
Tools and Plant ..	22,253	15,786	38,039	...	...	...	38,039	
Suspense Balance ..	..	..	..	43,057	...	-43,057	43,057	
	TOTAL ..	9,25,660	3,19,621	12,47,881	43,057	...	-43,057	12,90,964
Less Receipts on Capital Account.	224	...	224	..	...	...	224	
	NET TOTAL ..	9,25,636	3,19,621	12,47,657	43,057	..	-43,057	12,90,741
INDIRECT CHARGES—								
Capitalized abatement of Land Revenue—	2,094	.. 354	3,328	...	...	...	3,328	
Leave and Pension Allowances.	28,576	8,315	36,891	..	..	..	36,891	
	TOTAL ..	31,570	8,617	40,217	..	..	..	40,217
	GRAND TOTAL ..	9,59,000	3,28,208	12,87,874	43,057	..	-43,057	13,30,061

IRRIGATION BRANCH.

OFFICE OF ACCOUNTANT-GENERAL.

PUNJAB PROVINCE.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Lower Jhelum Canal Project.

No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OF ACCOUNT.	DIRECT CHARGES.			Cost of construction as now estimated.	Expenditure against closed Estimates.		
	Imperial.						
	Previous.	1915-16.	Total.				
	Rs.	Rs.	Rs.	Rs.	Rs.		
I.—WORK.							
1.—HEAD WORKS—							
A.—Preliminary Expenses	12,610	..	12,610				
B.—Land	31,772	..	31,772				
C.—Works	20,70,571	..	20,70,571				
E.—Buildings	1,28,978	..	1,28,978				
O.—Miscellaneous	19,273	..	19,273				
P.—Maintenance	28,020	..	28,020				
TOTAL	21,91,233	..	21,91,233				
2.—MAIN CANAL AND BRANCHES—							
A.—Preliminary Expenses	3,280	..	3,280				
B.—Land	2,40,781	..	2,40,781				
D.—Regulators	2,71,280	..	2,71,280				
E.—Falls and Weirs	2,71,047	..	2,71,047				
F.(1).—Other Cross Drainage Works	1,20,258	..	1,20,258				
G.—Bridges	6,01,284	..	6,01,284				
H.—Escapes	4,78,510	..	4,78,510				
J.—Hills	1,07,620	..	1,07,620				
K.—Buildings	10,13,102	17,386	10,30,547				
L.—Earth-work	22,03,007	..	22,03,007				
M.—Plantations	86,179	..	86,179				
O.—Miscellaneous	45,624	191	45,624				
P.—Maintenance	32,373	..	32,373				
TOTAL	57,17,100	17,386	57,34,486				
3.—DISTRIBUTARIES—							
A.—Preliminary Expenses	61,108	—7	61,101				
B.—Land	1,40,709	..	1,40,709				
C.—Works	15,28,400	358	15,28,458				
L.—Earth-work	13,37,875	..	13,37,875				
O.—Miscellaneous	5,50,800	—89	5,50,711				
P.—Maintenance	4,003	..	4,003				
TOTAL	36,30,365	102	36,30,517				

IRRIGATION BRANCH.

PUNJAB PROVINCE.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Lower Jhelum Canal Project.

No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEAD OF ACCOUNT,	DIRECT CHARGES.			Cost of construction as now estimated.	Expenditure against closed Estimates.		
	Imperial.						
	Previous.	1915-16	Total.				
4.—DRAINAGE AND PROTECTIVE WORKS—							
A.—Preliminary Expenses	.. .. .. ..	21,356	21,356			
B.—Land	... ... .. ..	13,638	13,638			
C.—Works	... ... .. ..	2,884	2,884			
L.—Earth-work	... ... .. ..	52,353	52,353			
O.—Miscellaneous	.. .. .. ..	1,759	1,759			
	TOTAL	91,800	91,990				
	TOTAL I—WORKS.	1,26,36,878	17,738	1,26,54,416	1,48,95,807		
II.—ESTABLISHMENT.							
5.—DIRECTION	... .. .. ..	6,00,764	750	6,01,514		
6.—EXECUTIVE	.. .. .. ..	15,10,533	2,833	16,13,366		
7.—MEDICAL	.. .. .. ..	29,633	..	29,633		
8.—SPECIAL SURVEY	.. .. .. ..	42,062	..	42,062		
	TOTAL	21,82,902	3,583	21,86,575	29,30,260		
III.—TOOLS AND PLANT.							
9.—NAVIGATION PLANT	.. .. .. ..	50	..	50		
12.—MISCELLANEOUS	.. .. .. ..	2,99,791	250	3,00,041		
13.—REPAIRS AND CARRIAGE	.. .. .. ..	62,566	..	62,566		
	TOTAL	3,62,407	250	3,62,657	4,20,715		
IV.—SUSPENSE ACCOUNT.							
14.—STOCK	.. .. .. ..	4,10,191	—6,638	4,12,553		
15.—STOCK PURCHASES	.. .. .. ..	—2,533	315	—2,218		
15a.—STOCK SALES	.. .. .. ..	98	—94	5		
16.—MISCELLANEOUS ADVANCES	.. .. .. ..	3,984	—869	3,115		
18.—LONDON STORES	.. .. .. ..	612	—612	..		
	TOTAL	4,21,353	—7,898	4,13,455	2,00,000		
	GRAND TOTAL.	1,56,03,430	13,673	1,56,17,103	1,84,55,782		
V.—LESS RECEIPTS ON CAPITAL ACCOUNT	..	40,462	..	40,462	60,000		
	NET TOTAL	1,55,62,968	13,673	1,55,76,641	1,83,95,732		
APPORTIONMENT.							
49.—IRRIGATION WORKS	.. .. .. ..	1,55,62,968	13,673	1,55,76,641		

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Lower Jhelum Canal Project.

No. 3.—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS.	IMPERIAL.			CHARGES.	IMPERIAL.		
	Previous.	1915-16.	Total.		Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
Occupiers' rates ..	2,07,30,121	25,80,593	2,33,10,687	I. A.—EXTENSIONS AND IMPROVEMENTS.			
Sales of water ..	81,897	14,912	96,809	1.—HEAD WORKS ...	4,43,651	5,370	4,49,021
Supply of towns ..	3,476	578	4,054	2.—MAIN CANAL AND BRANCHES.	1,67,030	7,161	1,75,091
Receipts from Plantations ..	20,795	7,551	28,346	3.—DISTRIBUTARIES ...	2,22,119	9,560	2,31,679
Receipts from other Canal produc.	8,052	102	8,115	4.—DRAINAGE AND PROTECTIVE WORKS.	3,858	120	3,987
Water power ..	1,26,237	30,207	1,56,504	TOTAL I. A. ...	8,27,558	22,220	8,59,778
Rent of Buildings ..	81,448	7,553	87,001	I. B.—MAINTENANCE AND REPAIRS.			
Fines ..	10,053	771	10,824	1.—HEAD WORKS ...	6,08,578	17,983	6,26,561
Miscellaneous and other Receipts ..	93,352	9,550	1,02,902	2.—MAIN CANAL AND BRANCHES.	17,54,603	1,21,418	18,76,108
Total ..	2,11,66,275	26,50,220	2,38,06,495	3.—DISTRIBUTARIES ...	15,96,440	1,03,903	17,00,352
Share of Land Revenue collected in the Civil Department.	64,02,101	14,00,445	78,68,630	4.—DRAINAGE AND PROTECTIVE WORKS.	62,477	3,357	65,834
Interest on sale proceeds of waste lands benefited.	5,84,562	65,898	6,50,460	TOTAL I. B. ...	40,22,107	2,46,658	42,68,855
Total ..	70,40,756	14,72,343	85,10,099	I. C.—COMPENSATION	5,218	629	5,847
TOTAL RECEIPTS ..	2,82,03,031	41,22,503	3,23,25,504	II.—ESTABLISHMENT.			
				3.—DIRECTION AND ACCOUNT.	4,01,048	9,738	4,50,780
				4.—EXECUTIVE ESTABLISHMENT.	17,11,121	2,03,211	19,14,332
				5.—MEDICAL Do. ...	1,07,136	(a) 10,528	1,17,664
				6.—REVENUE Do. ...	19,78,563	1,98,781	21,77,444
				TOTAL ...	41,07,003	4,02,288	46,60,228
				I.—SCIENTIFIC INSTRUMENTS AND DRAWING MATERIALS.	...	1,139	1,139
				2.—PLANT AND MACHINERY	...	135	135
				3.—TOOLS ...	...	2,121	2,121
				4.—CAMP EQUIPAGES ...	...	45	45
				5.—LIVE STOCK ...	...	70	70
				6.—OFFICE FURNITURE ...	...	1,634	1,634
				7.—MISCELLANEOUS ...	38,92	7,286	46,176
				REPAIRS AND CARRIAGE ...	80,131	8,003	80,034
				TOTAL ...	1,19,051	21,303	1,40,354
				IV.—REFUNDS OF REVENUE	9,033	780	9,813
				V.—PROFIT AND LOSS			
				TOTAL ...	91,91,025	7,53,848	99,44,873
				Indirect Charges debitable to Revenue Account as per Account No. 5.	6,69,516	61,791	6,58,307
				TOTAL CHARGES ...	97,70,541	8,18,030	1,05,08,180
				Balance, Net Revenue ..	1,84,23,400	38,03,924	2,17,27,414
				GRAND TOTAL ...	2,82,03,031	41,22,503	3,23,25,504

(a). Includes Rs. 74,023 on account of fees for collection of Revenue.

(b). Excludes share of account commencing from 1912-13.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Lower Jhelum Canal Project.

No. 4.—INTEREST ACCOUNT FOR AND TO END OF 1915-16.

	Amount.		Amount.
	Rs.		Rs.
Total Interest charges to end of 1914-15 ..	73,10,132	Net Revenue realised to end of 1914-15 ..	1,64,23,490
Do. for the year 1915-16 ..	..	Do. during 1915-16 ..	33,03,924
Total outlay to end of 31st March 1915. 1,55,76,641	..		
Deduct half outlay during 1915-16 6,836	..		
Mean Capital at charge 1,55,69,805	5,40,601		
Interest at 3.725 per cent .. "	..		
Total ..	73,60,703		
Balance Revenue after defraying Interest charges 1,38,70,621	..		
Total ..	2,17,27,414	Total ..	2,17,27,414

No. 5.—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

PARTICULARS.		Previous.	1915-16.	Total.
		Rs.	Rs.	Rs.
CAPITAL—				
Capitalization of abatement of Land Revenue ..	..	82,875	125	83,000
Leave and Pension Allowances ..	..	3,95,610	502	3,06,121
Total ..	..	3,88,404	627	3,69,121
REVENUE—				
Capitalization of abatement of Land Revenue ..	..	800	75	875
Leave and Pension Allowances ..	..	5,87,716	64,716	6,52,632
Total ..	..	5,88,516	64,791	6,63,307
GRAND TOTAL	..	9,77,010	7,418	10,42,428

No. 6.—STATEMENT COMPARING CHARGES TO DATE WITH SANCTIONED ESTIMATE.

PARTICULARS.	CHARGES AGAINST CLOSED SANCTIONS.			CURRENT SANCTIONS.			Total charges to date against old and current sanctions	REMARKS.
	Expenditure against Construction Estimates.	Expenditure against open canal sanctions.	Total.	Charges to date.	Amount of sanctioned Estimate.	Unspent Balance of Estimate.		
DIRECT CHARGES—				Rs.	Rs.	Rs.	Rs.	
Works			1,20,54,416	1,48,95,807	22,11,391	1,26,54,416	
Establishment			21,86,575	29,30,260	7,13,686	21,86,575	
Tools and Plant			3,02,657	4,29,715	67,058	3,02,657	
Suspense Balances			4,13,455	2,00,000	-2, 3,455	4,13,455	
Total			1,50,17,103	1,84,65,782	28,38,678	1,50,17,103	
LESS RECEIPTS ON CAPITAL ACCOUNT.				40,462	60,000	-538	40,462	
Net Total ..				1,55,76,641	1,93,95,782	28,19,141	1,55,76,641	
INDIRECT CHARGES—								
Capitalized abatement of Land Revenue.				83,000	1,57,863	7,863	83,000	
Leave and Pension Allowances ..				3,06,121	4,10,343	1,04,222	3,06,121	
Total			3,89,121	5,68,206	1,79,085	3,89,121	
GRAND TOTAL			1,59,65,762	1,80,63,988	29,94,220	1,59,65,762	

(a) Includes Rs. 2,05,933 actual direct expenditure on Shahpur Imperial Canal.

(b) Includes Rs. 998 on account of indirect expenditure on Shahpur Imperial Canal.

Both the above will be transferred to the debit of this project on completion of the Shahpur Branch of the Lower Jhelum Canal, vide Secretary, P. W. D. Irrigation Branch, Punjab's No. 085-A. I., dated 7th June 1905.

(c) Revised Project estimate sanctioned in Secretary of State's despatch No. 5, dated 10th February 1905.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Indus Inundation Canals Project.

No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OF ACCOUNT.	DIRECT CHARGE.			Cost of construction as now estimated (Construction Estimate closed on 31st March 1894).	Expenditure against closed Estimates.		
	Imperial.						
	Previous.	1915-16.	Total.				
I.—WORKS.							
2. MAIN CANAL AND BRANCHES—							
A.—Preliminary Expenses	9,721	..	9,721				
B.—Land	40,187	..	40,187				
C.—Regulator	73,502	3,402	77,205				
D.—Fall and Weir	32,746	1,270	34,016				
E.—River and Hill Torrent Works	402	..	402				
F.—Bridges	6,091	2,800	8,891				
G.—Escapes	14,031	..	14,031				
H.—Buildings	1,40,534	8,513	1,49,047				
I.—Earth-work	12,60,190	60,492	13,20,682				
J.—Miscellaneous	22,223	2,361	24,584				
TOTAL	16,43,507	1,14,910	17,58,418				
3. DISTRIBUTARIERS—							
A.—Preliminary Expenses	3,087	..	3,087				
B.—Land	38,420	1,781	38,187				
C.—Works	69,811	5,702	64,603				
D.—Earth work	1,81,526	6,700	1,00,316				
E.—Miscellaneous	8,636	..	8,636				
TOTAL	2,80,250	10,813	3,05,500				

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Indus Inundation Canals Project.

No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OR ACCOUNT.	DIRECT CHARGES.			Cost of construction as now estimated (Construction Estimate closed on 31st March 1894.)	Expenditure against closed Estimates.		
	Imperial.						
	Previous.	1915-16.	Total.				
4. DRAINAGE AND PROTECTIVE WORKS—							
K.—Buildings	1,613		1,613				
L.—Earth-work	3,43,978		3,43,978				
TOTAL	3,44,691	..	3,44,691	..	..
TOTAL I.—WORKS	22,77,484	1,31,232	" 24,08,716	24,51,333	7,59,127		
II.—ESTABLISHMENT.							
5. DIRECTION AND ACCOUNT	1,06,364	(a) 5,362	1,11,726				
6. EXECUTIVE	3,25,835	20,250	3,46,085				
7. MEDICAL	637	..	637				
TOTAL	4,32,700	27,618	4,58,381	4,72,473	1,13,115		
III.—TOOLS AND PLANT.							
12. MISCELLANEOUS	23,210	1,787	25,003				
13. REPAIRS AND CARRIAGE							
TOTAL	23,210	1,787	25,003	31,054	2,387		
IV.—SUSPENSE ACCOUNT.							
14. STOCK	74,287	-9,592	64,695				
15. MISCELLANEOUS ADVANCES	1,806	-1,658	148				
16. LONDON STORES .. .. ..	..	..	..	
TOTAL	76,093	-11,250	64,845				
GRAND TOTAL	24,93,560	1,47,387	26,56,976	26,55,423	9,01,620		
V. LESS RECEIPTS ON CAPITAL ACCOUNT.							
63,616	..	63,616	63,616	63,616	63,616		
NET TOTAL	27,45,973	1,47,387	28,93,360	28,91,800	8,41,013		
APPORTIONMENT.							
49.—IRRIGATION Works	20,23,460	1,47,387	21,70,847				
43.—M. W. AND NAVIGATION, IMPERIAL	7,22,513	..	7,22,513				

(a) Share of account excluded from 1912-13.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Indus Inundation Canals Project.

No. 3.—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS	IMPERIAL.			CHARGES.	IMPERIAL.		
	Previous.	1915-16	Total.		Previous.	1915-16	Total.
Occupiers' rates ..	Rs. 20,64,673	Rs. 1,36,691	Rs. 22,00,364	(1A)—EXTENSIONS AND IMPROVEMENTS	Rs. 8,62,390	Rs. 69,000	Rs. 10,22,460
Owners' rates on irrigated land.	Rs. 92,180	..	Rs. 92,180	2—MAIN CANAL AND BRANCHES 3—DISTRIBUTARIES .. 4—DRAINAGE AND PROTECTIVE WORKS.	Rs. 60,127	Rs. 4,666	Rs. 69,593
Fees of water ..	Rs. 5,663	Rs. 98	Rs. 5,761	TOTAL I. A. ..	Rs. 8,38,217	Rs. 63,660	Rs. 82,886
Supply of power ..	Rs. 1,118	..	Rs. 1,118	I.B.—MAINTENANCE AND REPAIRS.	..	..	..
Receipts from Plantation	Rs. 1,23,475	Rs. 2,667	Rs. 1,26,332	2—MAIN CANAL AND BRANCHES. 3—DISTRIBUTARIES .. 4—DRAINAGE WORKS ..	Rs. 63,78,690	Rs. 1,37,752	Rs. 65,16,251
Govt. share of Dhundi Produce.	Rs. 10,04,600	Rs. 66,178	Rs. 10,60,778	TOTAL I. B. ..	Rs. 2,03,410	Rs. 12,048	Rs. 2,06,367
Receipts from other Canal Produce.	Rs. 4,316	Rs. 20	Rs. 4,336	TOTAL I. C. ..	Rs. 6,80,310	Rs. 45,003	Rs. 10,34,822
Rent of Buildings ..	..	..	..	I.C.—COMPENSATION. II—ESTABLISHMENT	Rs. 5,733	Rs. 438	Rs. 6,171
Fines ..	Rs. 62,170	Rs. 2,872	Rs. 64,142	5—DIRECTION AND ACCOUNT. 6—EXECUTIVE ESTABLISHMENT. 7—MEDICAL ESTABLISHMENT. 7A.—REVENUE ESTABLISHMENT. 7C.—PLANTATION ESTABLISHMENT.	(a) Rs. 6,02,060	Rs. 12,934	Rs. 8,14,063
Miscellaneous and other receipts.	..	..	..	TOTAL ..	Rs. 23,75,702	Rs. 60,888	Rs. 24,42,660
Total ..	Rs. 93,59,533	Rs. 1,67,116	Rs. 95,46,649	7A.—REVENUE ESTABLISHMENT.	Rs. 28,783	Rs. 1,939	Rs. 30,722
Contribution of Silt Clearance.	Rs. 4,18,931	..	Rs. 4,18,931	TOTAL ..	Rs. 6,83,045	(b) Rs. 28,966	Rs. 6,62,511
Concession Rate ..	Rs. 12,70,605	..	Rs. 12,70,605	7C.—PLANTATION ESTABLISHMENT.	Rs. 6,946	..	Rs. 6,916
Total ..	Rs. 60,57,077	Rs. 1,67,116	Rs. 62,14,193	TOTAL ..	Rs. 36,16,326	Rs. 1,10,817	Rs. 38,50,512
Share of Land Revenue collected in the Department.	Rs. 1,02,37,030	Rs. 2,60,225	Rs. 1,04,98,155	I.—SCIENTIFIC INSTRUMENTS AND DRAWING MATERIALS ..	..	Rs. 61	Rs. 61
Interest on sale-proceeds of waste lands benefited	Rs. 38	Rs. 2	Rs. 40	2—PLANT AND MACHINERY.	..	..	..
Total ..	Rs. 1,02,37,008	Rs. 2,60,227	Rs. 1,04,98,196	3—TOOLS ..	..	Rs. 210	Rs. 210
TOTAL RECEIPTS ..	Rs. 1,52,95,045	Rs. 4,37,343	Rs. 1,57,02,388	4—NAVIGATION PLANT ..	Rs. 313	..	Rs. 313
				5—CAMP EQUIPAGE ..	..	Rs. 211	Rs. 211
				6—LIVE STOCK ..	..	..	..
				7—OFFICE FURNITURE ..	..	Rs. 204	Rs. 204
				8—REPAIRS AND CAREAGE.	Rs. 3,690	Rs. 1,070	Rs. 33,160
				MISCELLANEOUS ..	Rs. 350	Rs. 185	Rs. 37,874
				TOTAL ..	Rs. 70,801	Rs. 1,370	Rs. 72,171
				IV.—REFUNDS OF REVENUE.	Rs. 6,703	Rs. 108	Rs. 6,871
				V.—PROFIT AND LOSS.	Rs. 1,799	..	Rs. 1,500
				TOTAL ..	Rs. 1,34,48,542	Rs. 4,25,491	Rs. 1,34,74,023
				Indirect Charges debitable to Revenue Account as per Account No. 5.	Rs. 6,42,281	Rs. 16,261	Rs. 6,58,512
				TOTAL CHARGES ..	Rs. 1,40,90,613	Rs. 4,41,752	Rs. 1,45,31,505
				BALANCE, NOT REVENUE...	Rs. 12,04,232	Rs. 4,400	Rs. 11,90,823
				GRAND TOTAL ..	Rs. 1,52,95,045	Rs. 4,37,343	Rs. 1,57,02,388

(c) Share of account excluded from 1912-13.

(b) Includes Rs. 6,401 on account of fees for collection of Revenue.

IRRIGATION BRANCH.

OFFICE OF ACCOUNTANT-GENERAL.

PUNJAB PROVINCE.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16

Indus Inundation Canals Project.

No. 4—INTEREST ACCOUNT FOR AND TO END OF 1915-16.

		Amount.		
		Rs.		Rs.
Total Interest charges to end of 1914-15 ..	..	18,42,776	Net Revenue realized to end of 1914-15..	12,03,283
			Do. during 1915-16..	-4,409
Total outlay to 31st March 1916 = Rs. 28,93,360	..		Balance net Interest charges ..	7,40,866
Less half outlay during 1915-16 =,, 73,633	..			
Mean capital at charge =,, 22,19,667	..			
Interest at 3-4723 per cent.		87,913		
Total	..	10,40,659	Total ..	10,40,659

No. 3—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

Particulars	Previous.		1915-16.	Total.
	Rs.	Rs.	Rs.	
CAPITAL—				
Capitalization of abatement of Land Revenue	..	..	..	Rs. 8,257 60 Rs. 8,307
Leave and Pension Allowances .. .. .. ..	..	..	..	Rs. 68,952 8,567 Rs. 71,639
	TOTAL		Rs. 76,309	Rs. 7,637 Rs. 70,946
REVENUE—				
Capitalization of abatement of Land Revenue .. .. .. ..	..	..	..	Rs. 22,033 775 Rs. 23,408
Leave and Pension Allowances .. .. .. ..	..	..	..	Rs. 10,648 45,486 Rs. 55,134
	TOTAL		Rs. 6,12,281	Rs. 16,261 Rs. 18,512
	GRAND TOTAL		Rs. 7,18,390	Rs. 16,908 Rs. 73,898

NO. 6.—STATEMENT COMPARING CHARGES TO DATE WITH SANCTIONED ESTIMATE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Upper Chenab Canal Project.

No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OF ACCOUNT.	DIRECT CHARGES.			Cost of construction as now estimated,	
	Imperial.				
	Previous.	1915-16.	Total.		
I.—WORKS.		Rs.	Rs.	Rs.	
1.—HEAD WORKS—					
A.—Preliminary Expenses	£,220	55	8,284	
B.—Land	87,622	373	87,905	
C.—Works	67,11,315	—5,706	67,01,519	
K.—Buildings	1,98,207	1,350	1,80,557	
O.—Miscellaneous	18,593	65	18,598	
P.—Maintenance	1,35,343	..	1,35,343	
Q.—Losses on Stock	5,715	5,715	
TOTAL	..	71,40,249	792	71,40,011	
2. MAIN CANAL AND BRANCHES—					
A.—Preliminary Expenses	76,200	24	76,223	
B.—Land	9,63,413	4,768	9,68,171	
D.—Regulations	6,60,056	38,858	6,68,914	
E.—Falls and Weirs	9,52,356	—2,320	9,50,027	
E (1)—Other Cross Drainage Works	..	22,61,058	8,304	22,60,423	
G.—Bridges	16,70,818	613	16,71,431	
K.—Buildings	8,12,203	21,161	8,33,360	
L.—Earth work	60,41,023	1,852	60,43,275	
M.—Plantations	37,927	1,306	39,233	
O.—Miscellaneous	61,056	1,641	66,300	
P.—Maintenance	8,19,261	532	8,19,783	
Q.—Losses on Stock	5,910	1,802	7,211	
TOTAL	..	1,46,65,191	76,173	1,47,33,369	
3.—DISTRIBUTARIES—					
A.—Preliminary Expenses	1,30,012	6,666	1,30,608	
B.—Land	4,10,350	1,31,576	5,41,835	
C.—Works	10,14,173	2,07,330	13,41,812	
L.—Earth-work	15,04,682	2,10,734	17,21,316	
O.—Miscellaneous	1,42,492	74,203	2,16,785	
P.—Maintenance	14,308	..	14,308	
TOTAL	..	32,40,250	7,20,508	39,72,764	

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Upper Chenab Canal Project.

No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OF ACCOUNT.	DIRECT CHARGES.			Cost of con- struction as now estimated	
	Imperial.				
	Previous.	1915-16.	Total.		
4. DRAINAGE AND PROTECTIVE WORKS—					
A.—Preliminary Expenses	5,084	190	5,174		
B.—Land	93,569	8,237	1,02,116		
G.—Works	33,090	3,501	37,181		
L.—Earth-work	7,51,648	1,71,412	9,23,060		
C.—Miscellaneous	17,036	26	17,062		
TOTAL	9,02,517	1,83,406	10,85,923		
TOTAL I.—WORKS	2,50,63,216	8,98,881	2,69,12,097	3,00,10,491	
II.—ESTABLISHMENT.					
5. DIRECTION	10,10,403	47,586	10,57,989		
6. EXECUTIVE	27,03,023	2,02,461	29,05,384		
7. MEDICAL	1,14,040	12,438	1,26,478		
8. SPECIAL SURVEY	82,573	...	82,573		
8½. SPECIAL FIELD SURVEY	110	...	110		
LEAVE AND PENSION ALLOWANCES .. ..	...	...	...
TOTAL	39,71,040	2,62,486	42,33,524	42,67,174	
III.—TOOLS AND PLANT.					
1. SCIENTIFIC INSTRUMENTS AND DRAWING MATERIALS .. ..	...	272	272	
2. PLANT AND MACHINERY .. ..	...	6,635	6,635	
3. TOOLS .. ..	...	1,323	1,323	
4. NAVIGATION PLANT .. ..	...	606	606	
5. CAMP EQUIPAGE .. ..	...	28	28	
6. LIVE STOCK .. ..	...	100	100	
7. OFFICE FURNITURE .. ..	...	976	976	
12. MISCELLANEOUS	7,02,000	—6,535	6,95,165		
8. REPAIRS AND CARRIAGE	1,10,054	11,836	1,21,890		
11. RAILWAY PLANT AND ROLLING STOCK	8,65,370	..	8,65,370		
TOTAL	16,67,424	17,270	16,84,694	20,66,018	
IV.—SUSPENSE ACCOUNT.					
14. STOCK	8,81,802	—74,348	8,07,154		
15. STOCK PURCHASES	—3,036	1,639	—1,397		
15a. STOCK SALES	213	1,082	1,295		
16. MISCELLANEOUS ADVANCES	6,148	—2,003	4,145		
18. LONDON STORES .. ..	...	...	...
TOTAL	8,55,427	—73,930	8,11,497	3,00,000	
GRAND TOTAL	3,21,77,116	11,84,706	3,36,71,822	3,66,74,583	
V.—LESS RECEIPTS ON CAPITAL ACCOUNT	47,071	248	47,319	5,43,000	
Net Total ..	3,21,30,015	11,84,458	3,36,24,503	3,61,31,583	
APPORTIONMENT.					
49.—IRRIGATION WORKS	3,23,52,174	11,94,458	3,35,16,632		
43.—L. W. AND NAVIGATION	1,07,871	...	1,07,871		

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Upper Chenab Canal Project.

No. 3—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS	IMPERIAL			CHARGES	IMPERIAL			
	Previous	1915-16	Total		Previous	1915-16	Total	
					Rs.	Rs.	Rs.	
Occupiers' rates .. .	12,77,021	9,27,055	22,04,076	(A.)—EXTENSIONS AND IMPROVEMENTS:				
Sales of water .. .	426	259	685	(1)—HEAD WORKS .. .	7,211	9,623	16,834	
				(2)—MAIN CANAL & BRANCHES .. .	1,52,188	98,383	2,50,571	
				TOTAL I. A. .. .	1,59,399	1,08,006	2,67,405	
Water supply of towns .. .	.. .	1,814	1,814	(B.)—MAINTENANCE AND REPAIRS:			
Receipts from Plantations .. .	1,082	206	1,350	(1).—HEAD WORKS .. .	1,43,961	37,162	1,80,633	
				(2).—MAIN CANAL & BRANCHES .. .	3,37,710	1,69,361	5,07,080	
				(3).—DISTRIBUTORIES .. .	1,95,354	1,44,438	3,39,792	
				(4).—DRAINAGE WORKS .. .	31,949	41,139	72,088	
Receipts from other Canal produce.	480	31	511	TOTAL I. B. .. .	6,09,570	3,92,123	10,90,693	
Rent of Buildings .. .	12,669	5,027	17,696	(I. C.)—COMPENSATION:	0	37,730	37,730	
				(II)—ESTABLISHMENT:				
Fines .. .	1,132	1,230	2,362	(5).—DIRECTION AND ACCOUNT .. .	26,046	(b) 27,831	53,830	
Miscellaneous and other Receipts	20,303	21,178	41,571	(6).—EXECUTIVE ESTABLISHMENT .. .	1,80,966	80,972	2,11,938	
Total .. .	13,14,387	9,56,571	22,71,258	(7A).—REVENUE-DO. .. .	2,37,067	(a) 1,41,410	3,78,377	
Interest on sale-proceeds of waste lands benefited.	32,240	36,637	68,887	TOTAL .. .	3,94,979	2,50,168	6,45,146	
Share of land revenue .. .	1,75,410	29,410	1,99,850	(III).—TOOLS AND PLANT:				
Collected in the Civil Department.	2,07,066	81,077	2,68,742	(1).—SCIENTIFIC INSTRUMENTS AND DRAWING MATERIALS .. .		42	42	
				(2).—PLANT AND MACHINERY .. .		3,573	3,573	
				(12).—MISCELLANEOUS .. .	4,726	7,146	11,870	
				(13).—REPAIRS AND CARRIAGE .. .	6,811	...	6,811	
				TOTAL .. .	11,530	10,760	22,296	
				(IV).—REFUNDS OF REVENUE:				
				TOTAL .. .	1,460	616	2,075	
				Indirect Charges debitable to Revenue Account as per Account No. 5	55,297	35,023	90,320	
				TOTAL CHARGES .. .	13,21,260	8,34,423	21,55,673	
				Balance, Net Revenue .. .	2,00,812	1,83,526	3,84,337	
				GRAND TOTAL .. .	15,22,062	10,17,948	25,40,010	

(a). Includes Rs. 29,303 on account of fees for collection of Revenue.

(b). Excluding Accounts from 1912-13.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Upper Chenab Canal Project.

No. 4—INTEREST ACCOUNT FOR AND TO END OF 1915-16.

	Amount.		Amount.
Total Interest charges to end of 1914-15 Do. for the year 1915-16	Rs. 60,41,796	Net Revenue realized to end of 1914-15 Do. during 1915-16	Rs. 2,00,912 1,83,525
Total outlay to end of 31-3-16 = Rs. 3,30,24,503			
Less £ outlay during 1915-16 = n 5,97,229		Balance net Interest charges	Rs. 08,04,331
Mean Capital at charge = , 3,30,27,274	11,46,872		
Interest at 3·4725 per cent.			
Total ..	71,98,668	Total ..	71,98,668

No. 5.—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

PARTICULARS.	Previous.			1915-16.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.
CAPITAL—					
Capitalization of abatement of Land Revenue	2,78,000	12,825
Leave and Pension Allowances	5,18,617	36,745
		Total	..	8,27,517	49,573
REVENUE—					
Leave and Pension Allowances	55,207	35,023
		Total	..	55,207	35,023
					90,320

No. 6.—STATEMENT COMPARING CHARGES TO DATE WITH SANCTIONED ESTIMATE.

PARTICULARS.	CURRENT SANCTIONS.			Total charges to date against old and current sanctions.	REMARKS.
	Charges to date.	Amount of Sanctioned Estimate.	Unspent Balance of Estimate		
DIRECT CHARGES—					
Works	..	..	..	2,60,12,097	2,60,12,097
Establishment	..	..	..	42,33,533	42,33,533
Tools and Plant	..	..	..	10,83,694	10,83,694
Suspense Balances	..	..	..	8,11,497	8,11,497
	Total	..	..	3,30,71,622	3,30,71,622
<i>Less Receipts on Capital Account</i>	..	..	..	47,319	47,319
	Net Total	..	..	3,30,24,503	3,30,24,503
INDIRECT CHARGES—					
Capitalized abatement of Land Revenue	..	..	..	2,01,725	2,01,725
Leave and Pension Allowances	..	..	..	5,85,365	5,85,365
	Total	..	..	8,77,090	8,77,090
GRAND TOTAL	..	..	..	3,45,01,593	3,45,01,593

IRRIGATION BRANCH. PUNJAB PROVINCE,
 OFFICE OF ACCOUNTANT GENERAL,
 ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.
 Lower Bari Doab Canal Project.
 No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OF ACCOUNT.	DIRECT CHARGES.			Cost of con- struction as now estimated.	Rs.		
	Imperial.						
	Previous.	1915-16.	Total.				
I.—WORKS.							
1. Head Works—	Rs.	Rs.	Rs.	Rs.	Rs.		
A.—Preliminary Expenses	13,167	400	13,567				
B.—Land	2,21,135	1,036	2,22,171				
C.—Works	44,62,361	1,23,674	45,76,035				
K.—Buildings	1,33,436	142	1,33,578				
O.—Miscellaneous	21,600	92	21,701				
P.—Maintenance	78,700	...	78,700				
TOTAL	10,20,700	1,25,373	60,46,172				
2. Main Canal and Branches—							
A.—Preliminary Expenses	1,10,300	208	1,10,508				
B.—Land	58,700	—8,624	47,082				
D.—Regulators	1,27,792	...	1,27,792				
E.—Falls and Weirs	1,15,853	...	1,15,853				
F.—River and Hill Torrent Works ...	671	...	671				
F. (1).—Other Cross Drainage Works ...	4,52,117	1,698	4,54,415				
G.—Bridges	4,50,338	13,412	4,72,750				
H.—Escapes	51,317	11,005	62,322				
K.—Buildings	8,2,530	57,815	10,11,015				
L.—Earth-work	33,35,122	...	33,35,122				
M.—Plantations	92,346	23,336	1,15,676				
O.—Miscellaneous	78,760	3,100	80,860				
P.—Maintenance	2,15,261	10,467	2,31,718				
Q.—Losses on Stock	377	28	405				
TOTAL	63,67,634	1,17,165	61,76,303				
3. DRAINING WORKS—							
A.—Preliminary Expenses	88,230	8,976	90,314				
B.—Land	1,48,701	—17,025	1,31,676				
C.—Works	10,92,356	1,13,454	11,95,810				
L.—Earth-work	12,70,723	92,301	13,68,114				
O.—Miscellaneous	9,23,764	2,32,576	11,56,330				
P.—Maintenance	24,561	7,615	32,109				
TOTAL	35,10,317	4,37,016	39,77,332				
4. DRAINAGE AND PROTECTION WORKS.							
A.—Preliminary Expenses	4,474	1,261	5,735				
B.—Land ... ...	...	409	409			
C.—Works ... ...	...	720	720			
L.—Earth-work	2,022	6,510	8,541				
O.—Miscellaneous	8,180	680	9,000				
TOTAL	14,676	9,703	24,100				
TOTAL I.—WORKS	1,49,33,660	6,80,610	1,65,23,300	1,63,80,208			

IRRIGATION BRANCH. PUNJAB PROVINCE.
OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Lower Bari Doab Canal Project.

No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OF ACCOUNT.	DIRECT CHARGES.			Cost of construction as now estimated.	
	Imperial.				
	Previous.	1915-16.	Total.		
	Rs.	Rs.	Rs.	Rs.	
II.—ESTABLISHMENT.					
5. DIRECTION AND ACCOUNTS (a) ..	4,58,017	42,517	5,30,564		
6. EXECUTIVE	18,87,827	2,11,326	20,99,153		
7. MEDICAL	60,392	12,184	82,576		
8. SPECIAL SURVEY	7,810	..	7,810		
TOTAL ..	24,61,076	2,66,057	27,30,133	35,49,734	
III.—TOOLS AND PLANT.					
1. SCIENTIFIC INSTRUMENTS AND DRAWING MATERIALS ..		671	671		
2. PLATES AND MACHINERY		9,734	9,734		
3. TOOLS		427	427		
4. NAVIGATION PLANT		4,181	4,181		
5. CAMP EQUIPAGE		680	680		
6. LIVE STOCK .. .. ..		..	..
7. OFFICE FURNITURE		2,153	2,153		
8. REPAIRS AND CARBAGE	89,026	13,998	1,03,924		
9. MISCELLANEOUS	6,40,276	—32,711	6,07,564		
10. RAILWAY PLANT AND ROLLING STOCK ..	7,83,454	..	7,83,454		
TOTAL ..	15,13,656	—608	15,12,958	17,15,905	
IV.—SUSPENSE ACCOUNT.					
14. STOCK	10,07,440	—14,360	9,63,080		
15. STOCK PURCHASES	—1,360	—1,179	—2,639		
15 (a). STOCK SALES	327	386	713		
16. MISCELLANEOUS ADVANCES	3,307	—1,702	1,605		
17. LONDON INVOICES	—1	..	—1		
18. LONDON STORES .. .. ..	..	..	..
TOTAL ..	10,09,714	—37,914	9,62,400	3,00,000	
GRAND TOTAL ..	1,99,21,105	9,92,701	2,07,28,806	2,10,51,940	
V.—LESS RECEIPTS ON CAPITAL ACCOUNT	46,271	15,665	61,936	2,92,000	
Net Total ..	1,97,74,831	8,92,136	2,06,66,904	2,10,50,940	
APPORTIONMENT.					
49.—IRRIGATION WORKS	1,00,07,710	8,92,133	2,01,00,443		
43.—M. W. AND NAVIGATION, IMPERIAL ..	1,67,521	..	1,67,521		

(a). Excluded share of account from 1912-13.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Lower Bari Doab Canal Project.

No. 2.—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPT.	IMPERIAL.			CHARGES.	IMPERIAL.			
	Previous	1915-16.	Total.		Previous	1915-16.	Total.	
					Rs.	Rs.	Rs.	
Occupiers' rates ..	5,19,171	4,26,970	9,46,141	(I.A.)—EXTENSIONS AND IMPROVEMENTS.				
				1.—HEAD WORKS ...	...	2,137	2,137
				2.—MAIN CANALS AND BRANCHES	..	2,717	2,717	
				3.—DISTRIBUTARIES	..	7,338	7,338	
				4.—DRAINAGE AND PROTECTIVE WORKS.	..	...	...
Sale of water ..	616	1,365	1,930	TOTAL I. A.	..	12,192	12,192	
				(I. B.)—MAINTENANCE AND REPAIRS.				
				1.—HEAD WORKS...	38,021	81,696	89,717	
				2.—MAIN CANAL AND BRANCHES	90,210	1,72,070	2,71,280	
				3.—DISTRIBUTARIES	1,83,737	1,83,600	2,18,297	
Receipts from Plantations ..	2,423	1,408	3,831	4.—DRAINAGE WORKS	..	6,691	974	
" " other Canal produce	303	2	305	TOTAL I. B.	..	2,77,459	4,09,300	
Rent of buildings ..	1	..	1	(I.C.)—COMPENSATION.				
Fines ..	621	610	1,061	(II).—ESTABLISHMENT.				
				5.—DIRECTION AND ACCOUNTS	(a) 12,025	24,377	37,502	
				6.—EXECUTIVE ESTABLISHMENT	43,735	69,307	1,13,132	
				(7A.)—REVENUE Do.	.. 68,918	1,01,666	1,09,581	
				TOTAL	.. 1,54,573	1,95,911	3,50,515	
				III.—TOOLS AND PLANT.				
				12.—MISCELLANEOUS	.. 3,960	6,119	0,979	
Miscellaneous and other Receipts.	10,387	2,930	13,296	TOTAL	.. 3,860	6,119	0,979	
				IV.—REFUND OF REVENUE				
				V.—PROFIT AND LOSS.				
				TOTAL	.. 4,35,902	6,24,316	10,60,207	
Total	5,33,670	4,33,173	9,66,723	Indirect Charge debit able to Revenue Account as per Account No. 5.				
Share of Land Revenue collected in the Civil Department.	..	..	..	TOTAL CHARGES	.. 1,67,032	6,51,647	11,00,279
Interest on sale proceeds of waste land benefited.	47,126	1,20,086	1,68,114	Balance, Net Revenue	.. 1,23,040	—07,185	23,653	
Total Receipts	5,80,676	5,51,160	11,31,837	GRAND TOTAL	.. 5,80,676	5,51,160	11,31,837	

(a). Excludes share of accounts since 1912-13.

(b). Includes Rs. 12,103 on account of Lambardars' fees.

IRRIGATION BRANCH.

OFFICE OF ACCOUNTANT-GENERAL.

PUNJAB PROVINCE.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Lower Bari Doab Canal Project.

No. 4.—INTEREST ACCOUNT FOR AND TO END OF 1915-16.

	AMOUNT.		AMOUNT.
	Rs.		Rs.
Total Interest charges to end of 1914-15 ..	25,04,706	Net Revenue realized to end of 1914-15 ..	1,23,046
Do. for the year 1915-16 ..	..	Do. during 1915- ..	-47,488
Total outlay to 31st March 1916 = Rs. 2,00,06,964 ..	..	Balance net Interest charges ..	31,81,109
Less ½ outlay during 1915-16 = .. 4,46,066 ..	..	
Mean capital at charge = .. 2,02,20,898 ..	..	
Interest at 3.4725 ..	7,02,171		
Total ..	32,08,967	Total ..	32,08,967

No. 5.—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

	PARTICULARS.	Previous.	1915-16.	Total.
			Rs.	
CAPITAL—				
Capitalization of abatement of Land Revenue	42,150	1,600 43,750
Leave and Pension Allowances	3,34,030	37,248 371,278
		Total ..	3,76,180	36,948 4,15,028
REVENUE—				
Leave and Pension Allowances	21,640	27,432 49,072
		Total ..	21,640	27,432 49,072

No. 6.—STATEMENT COMPARING CHARGES TO DATE WITH SANCTIONED ESTIMATE.

PARTICULARS.	CURRENT SANCTIONS.			REMARKS.
	Charges to date.	Amount of Sanctioned Estimate.	Unspent Balance of Estimate.	
	Rs.	Rs.	Rs.	Rs.
DIRECT CHARGES—				
Works	1,55,23,306	1,63,86,208	8,62,992	1,55,23,306
Establishment	27,30,133	35,49,734	8,19,601	27,30,133
Tools and Plant	15,12,958	17,16,908	2,02,020	15,12,958
Suspense Balance	9,62,460	3,00,000	-6,62,460	9,62,460
Total	2,07,29,896	2,10,51,940	12,22,044	2,07,29,896
Less Receipts on Capital Account	61,932	2,42,000	2,20,068	61,932
Not Total	2,00,06,964	2,16,69,940	10,02,976	2,00,06,964
INDIRECT CHARGES—				
Capitalized abatement of Land Revenue ..	43,750	1,47,500	1,03,750	43,750
Leave and Pension Allowances ..	3,71,278	5,10,062	1,39,584	3,71,278
Total	4,15,028	6,53,462	2,43,484	4,15,028
GRAND TOTAL	2,10,81,992	2,32,28,402	12,46,410	2,10,81,992

Revised estimate sanctioned in Secretary of State's despatch No. G.P.W., dated 17th February 1911.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Upper Jhelum Canal Project.

No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OF ACCOUNTS.	DIRECT CHARGES.			Cost of construction as now estimated,	
	Imperial.				
	Previous.	1915-16.	Total.		
	Rs.	Rs.	Rs.		
I.—WORKS.					
1.—HEAD WORKS—					
A.—Preliminary Expenses	7,349	... ..	7,349	
B.—Land	11,020	... ..	11,020	
C.—Works	1,818	... ..	1,818	
K.—Buildings	1,50,470	—0	1,50,470	
O.—Miscellaneous	36,679	1,512	38,021	
P.—Maintenance	14,234	718	14,952	
	Total	2,55,500	2,051	2,56,551	
2.—MAIN CANAL AND BRANCHES—					
A.—Preliminary Expenses	1,10,010	1,053	1,11,063	
B.—Land	9,10,014	4,914	9,21,558	
D.—Regulators	27,75,208	5,31,394	33,18,102	
J.—Falls and Weirs	1,65,006	4,632	1,69,238	
F.—River and Hill Torrent Works	1,30,60,588	40,390	1,31,00,978	
G.— Bridges	10,07,935	12,653	10,20,588	
H.—Escapages	2,30,213	19,694	2,58,807	
K.—Buildings	5,70,110	75,931	6,46,041	
L.—Earth-work	1,01,04,720	4,26,174	1,05,20,894	
M.—Plantations	52,760	2,557	55,756	
O.—Miscellaneous	51,758	2,020	53,778	
P.—Maintenance	3,97,531	90,255	3,97,842	
Q.—Losses on Slick	2,006	2,366	6,160	
	Total	2,93,75,612	12,21,936	3,05,97,548	
3.—DRAINING AND DREDGING					
A.—Preliminary Expenses	23,921	5,680	26,610	
B.—Land	53,365	51,913	1,07,582	
C.—Work	52,375	2,24,707	2,77,092	
L.—Earth-work	66,203	2,00,160	2,66,363	
O.—Miscellaneous	10,017	(a) 32,111	52,066	
	Total	2,15,914	5,15,871	7,01,686	

(a). Includes Rs. 10,792 on account of outcry on settlers' works to be recovered.

IRRIGATION BRANCH.
OFFICE OF ACCOUNTANT-GENERAL.

PUNJAB PROVINCE.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Upper Jhelum Canal Project.

No. 2—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OF ACCOUNT.	DIRECT CHARGES.			Cost of construction as now estimated.	
	Imperial.		Total.		
	Previous.	1915-16.			
Rs.	Rs.	Rs.	Rs.	Rs.	
4. DRAINAGE AND PROTECTIVE WORKS—					
<i>A.—Preliminary Expenses</i>	6,058	...	6,058		
<i>O.—Miscellaneous</i> ... .. .. .. ..	...	127	127	
TOTAL	6,058	127	7,085		
TOTAL I.—WORKS	2,98,85,974	17,33,583	3,16,23,562	8,40,11,855	
II.—ESTABLISHMENT.					
5. DIRECTION AND ACCOUNT (a)	8,50,787	48,703	8,99,592		
6. EXECUTIVE	31,42,005	2,39,263	33,81,359		
7. MEDICAL	1,06,611	16,074	1,22,685		
TOTAL	40,00,403	3,04,133	44,03,526	46,02,371	
III.—TOOLS AND PLANT.					
1. SCIENTIFIC INSTRUMENTS AND DRAWING MATERIALS ... .. .. .. ..	...	248	248	
2. PLANT AND MACHINERY	28,62,243	-1,084	28,51,159		
3. TOOLS ... .. .. .. ..	...	-2,436	-2,436	
4. NAVIGATION PLANT ... .. .. .. ..	...	323	323	
5. CAMP EQUIPAGE ... .. .. .. ..	...	455	455	
7. OFFICE FURNITURE ... .. .. .. ..	...	8,568	8,568	
8. REPAIRS AND CARBAGE	1,36,743	6,706	1,45,630		
MISCELLANEOUS	16,32,235	-62,060	14,70,175		
TOTAL	45,33,221	-51,192	44,70,029	45,81,540	
IV.—SUSPENSE ACCOUNT.					
14. STOCK	12,52,036	-77,109	11,74,927		
15. STOCK PURCHASES	-10,829	-5,358	-10,187		
15a. STOCK SALES ... .. .. .. ..	...	631	634	
17. MISCELLANEOUS ADVANCES	1,224	7,276	8,500		
17. LONDON INVOICES ... .. .. .. ..	...	...	...
18. LONDON STORES	517	-517	...		
TOTAL	12,42,948	-76,074	11,67,874	6,00,000	
GRAND TOTAL	3,97,61,036	10,14,853	4,16,76,491	4,13,95,766	
V.—LESS RECEIPTS ON CAPITAL ACCOUNT	76,301	0,694	95,105	11,55,484	
NET TOTAL	3,06,96,385	18,94,961	4,15,81,200	4,32,40,282	
APPORTIONMENT.					
49.—IRRIGATION WORKS	3,96,10,367	18,94,001	4,15,14,348		
63.—MINOR WORKS AND NAVIGATION, IMPERIAL	66,048	...	66,048		

(a). Excludes share of account commencing from 1912-13.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL:
ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Upper Jhelum Canal Project.

No. 3.—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS.	IMPERIAL.			CHARGES.	IMPERIAL.		
	Previous.	1915-16.	Total.		Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.	(I.A.)—EXTENSIONS AND IMPROVEMENTS.		Rs.	Rs.
				2.—MAIN CANAL BRANCHES	..	20,225	20,225
				TOTAL I. A. ..	..	20,225	20,225
				(II.B)—MAINTENANCE AND REPAIRS.			
				I.—HEAD WORKS ..	..	10,000	10,000
				2.—MAIN CANAL AND BRANCHES	..	2,30,678	2,30,678
				TOTAL II. B. ..	..	2,50,338	2,50,338
				(III). ESTABLISHMENT.			
Rent of Buildings	..	..	3,120	5.—DIRECTION AND ACCOUNTS (a)	..	8,446	8,446
				6.—EXECUTIVE ESTABLISHMENT.	..	44,254	44,254
				7A.—REVENUE Do. ..	..	0,634	0,634
				TOTAL III. ..	..	50,334	50,334
Miscellaneous and other Receipts	..	..	3,144	3,144			
				III.—TOOLS AND PLANT.			
				3.—Tools ..	..	—29	—29
				7.—OFFICE FURNITURE ..	..	71	71
				MISCELLANEOUS ..	..	3,904	3,904
				TOTAL ..	..	3,946	3,946
				IV.—REFUND OF REVENUE	..	30	30
				TOTAL ..	..	3,33,873	3,33,873
				Indirect Charges debitible to Revenue Account as per Account No. 6.	..	8,307	8,307
				TOTAL CHARGES ..	..	3,42,180	3,42,180
Total	..	..	6,204	Baleno, Net Revenue ..	..	—3,35,010	—3,35,010
TOTAL RECEIPTS	..	..	6,204	GRAND TOTAL ..	..	6,264	6,264

(a). Excludes share of accounts.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Upper Jhelum Canal Project.

No. 4—INTEREST ACCOUNT FOR AND TO END OF 1915-16.

	Amount.		Amount.
	Rs.		Rs.
Total Interest charges to end of 1914-15	57,18,174	Net revenue realized during 1915-16	..
Do. for the year 1915-16	..	..	-3,35,916
Total outlay to 31st March 1916 = Rs. 4,15,81,296		Balance net Interest charges	..
Less half outlay during 1915-16 = " 9,47,480		..	74,65,099
Mean capital at charge = " 4,06,32,816			
Interest at 3.4725 per cent = " 14,11,000	14,11,000		
Total ..	71,29,183		71,29,183

No. 5—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

Particulars.	Previous.	1915-16.		Total.
		Rs.	Rs.	
CAPITAL—				
Capitalization of abatement of Land Revenue	1,68,125	6,300	1,68,325
Leave and Pension Allowances	5,68,019	42,679	6,11,498
Total	7,31,044	48,779	7,79,823
REVENUE—				
Capitalization of abatement of Land Revenue			
Leave and Pension Allowances		8,307	8,307
Total		8,307	8,307
GRAND TOTAL	7,31,044	67,086	7,88,130

PARTICULARS.	CURRENT SANCTIONS.			REMARKS.
	Charges to date.	Amount of Sanctioned Estimate.	Unspent Balance of Estimate.	
	Rs.	Rs.	Rs.	Rs.
DIRECT CHARGES—				
Works ..	3,16,25,902	3,40,11,855	29,65,693	3,16,25,902
Establishment ..	44,03,626	46,02,371	1,98,745	44,03,626
Tools and Plant ..	44,79,020	45,81,540	1,02,511	44,79,020
Suspense Balances ..	11,67,874	6,00,000	-5,67,874	11,67,874
Total ..	4,10,76,101	4,13,95,766	27,10,277	4,10,76,101
Less Receipts on Capital Account.	95,195	11,65,493	10,60,289	95,195
Net Total ..	4,15,81,296	4,32,40,282	16,56,986	4,15,81,296
INDIRECT CHARGES—				
Capitalized abatement of Land Revenue.	1,68,325	1,10,043	-57,386	1,68,325
Leave and Pension Allowances.	6,11,498	8,45,332	3,33,834	6,11,498
Total ..	7,79,823	10,56,277	2,76,461	7,79,823
GRAND TOTAL ..	4,23,61,119	4,42,96,560	19,35,440	4,23,61,119

Changes in figures of sanctioned estimate for I—Works and II—Establishment as compared with the sanctions shown in the last account are due to the transfer of Rs 100,000 from the head II—Establishment of the Upper Jhelum Circle and Rs 300,000 from Lower Bari Doab Circle to the head I—Works of the Upper Jhelum Circle vide Government of India P.W.D. No. 615 A. I. dated 9th June 1915.

IRRIGATION BRANCH.

OFFICE OF ACCOUNTANT-GENERAL.

PUNJAB PROVINCE.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Shahpur Canal Project—Imperial.

No. 3—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OF ACCOUNT.	DIRECT CHARGES.			Cost of construction as now estimated (Construction Estimate closed on 31st March 1904).	Expenditure against closed Estimates.		
	Imperial.						
	Previous.	1915-16.	Total.				
I.—WORKS.	Rs.	Rs.	Rs.	Rs.	Rs.		
B.—MAIN CANAL AND BRANCHES—							
B.—Land	3,028	...	3,028				
D.—Regulator	13,187	...	13,187				
G.—Bridges	20,622	...	20,622				
L.—Earth-work	80,974	...	80,974				
TOTAL ..	1,20,711	...	1,20,711				
3.—DISTRIBUTARIES—							
B.—Land	8,219	...	8,219				
C.—Works	18,561	...	18,561				
L.—Earth-work	21,560	...	21,560				
TOTAL ..	48,340	...	48,340				
TOTAL I.—WORKS ..	1,75,060	..	1,75,060	1,75,060	1,75,060		
II.—ESTABLISHMENT.							
5. DIRECTION	7,518	...	7,518				
6. EXECUTIVE	12,712	...	12,712				
TOTAL ..	30,260	..	30,260	30,260	30,260		
III.—TOOLS AND PLANT.							
12. MISCELLANEOUS	685	...	685				
13. REPAIRS AND CARRIAGE	28	...	28				
TOTAL ..	613	...	613	613	613		
GRAND TOTAL ..	2,05,933	..	2,05,933	2,05,933	2,05,933		
APPORTIONMENT.							
49—Irrigation Works	2,05,933	..	2,05,933	2,05,933	2,05,933		

Note—Capital and Revenue accounts of these Canals will continue to be prepared separately until the Shahpur Branch of the Lower Jhelum Canal has been constructed and opened for Irrigation, vide Secretary to Govt., Punjab; P. W. D. Irrigation Branch letter No. 080 A. I., dated 7-8-1905.

IRRIGATION BRANCH.

OFFICE OF ACCOUNTANT-GENERAL.

PUNJAB PROVINCE.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Shahpur Canal Project—Imperial.

No. 3.—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS.	IMPERIAL.			CHARGES.	IMPERIAL.		
	Previous	1915-16.	Total.		Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.	(I.A.)—EXTENSIONS AND IMPROVEMENTS.	Rs.	Rs.	Rs.
Occupiers' rates ..	21,19,916	76,916	21,95,832	2.—MAIN CANAL AND BRANCHES.	82,238	...	82,238
				3.—DISTRIBUTARIES ..	14,365	258	14,623
Sales of water ..	1,300	..	1,700	TOTAL I.A. ..	96,603	258	96,861
				(I.B.)—MAINTENANCE AND REPAIRS.			
Receipts from Plantations ..	10,419	157	10,576	2.—MAIN CANAL AND BRANCHES	5,93,804	10,895	6,13,789
Receipts from other Canal produce.	3,835	21	3,856	3.—DISTRIBUTARIES ..	1,17,025	5,262	1,22,287
Rent of Buildings ..	1,388	..	1,486	TOTAL I. B. ..	7,10,910	25,157	7,36,076
				(I. C.)—COMPENSATION.	553	...	553
Fines ..	1,806	..	1,860	(II.) ESTABLISHMENT			
				5.—DIRECTION AND ACCOUNT.	67,813	5,686	73,399
Miscellaneous and other Receipts.	1,719	..	1,719	6.—EXECUTIVE ESTABLISHMENT.			
				7.—MEDICAL Do. ..	4,53,484	(a) 18,512	4,71,996
				7A.—REVENUE Do. ..			
				7B.—NAVIGATION Do. ..			
				TOTAL ..	5,21,297	21,098	5,45,395
				III.—TOOLS AND PLANT.			
				12.—MISCELLANEOUS ..	3,109	...	3,109
				13.—REPAIRS AND CARRIAGE ..	2,012	...	2,012
				TOTAL ..	5,121	...	5,121
Total ..	21,46,154	77,094	22,23,248	(V.)—REFUNDS OF REVENUE	1,233	...	1,233
				TOTAL ..	13,35,726	49,513	13,85,239
Share of Land Revenue collected in the Civil Department.	3,27,215	15,107	3,42,322	Indirect Charges debitible to Revenue Account as per Account No. 5.	74,452	3,374	77,826
				TOTAL CHARGES ..	14,10,178	52,887	14,63,065
Total ..	3,27,215	15,107	3,42,322	Balance, Net Revenue ..	10,63,191	30,814	11,02,505
TOTAL RECEIPTS ..	24,73,360	92,201	25,65,570	GRAND TOTAL .. .	24,73,359	92,201	25,65,570

(a) Includes Rs. 2,312 on account of fees for collection of revenue.

(b) Excludes share of accounts commencing from 1912-13.

55
 IRRIGATION BRANCH. PUNJAB PROVINCE.
 OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Shahpur Canal Project--Imperial.

No. 5.—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

Particulars.	Previous.	1915-16.		Total.
		Rs.	Rs.	
CAPITAL—				
Capitalization of abatement of Land Revenue ..	..	5,638	..	5,638
Leave and Pension Allowances ..	..	4,343	..	4,343
	Total	9,981	-	9,981
REVENUE—				
Capitalization of abatement of Land Revenue ..	.	044	..	044
Leave and Pension Allowances ..	..	73,508	3,374	76,882
	Total	74,452	3,374	77,826
	GRAND TOTAL	81,433	3,374	87,807

No. 6.—STATEMENT COMPARING CHARGES TO DATE WITH SANCTIONED ESTIMATE.

PARTICULARS.	CHARGES AGAINST CLOSER SANCTIONS			CURRENT SANCTIONS.				REMARKS.
	Expenditure against Construction Estimate	Expenditure against open canal sanctions.	Total.	Charges to date.	Amount of sanctioned Estimate.	Unspent Balance of Estimate.	Total charges to date against old and current sanctions.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
DIRECT CHARGES—								
Works ..	1,75,060	..	1,75,060	..	..	..	1,75,060	
Establishment	30,360	..	30,360	..	..	..	30,360	
Tools and Plants	613	..	613	..	..	..	613	
	Total	2,05,933	..	2,05,933	..	..	2,05,933	
<i>Less—Receipts on Capital Account.</i>	..	..	..	..	..	..	..
Not Total	..	..	..	..	..	..	..
INDIRECT CHARGES—								
Capitalised abatement of Land Revenue.	5,638	..	5,638	..	..	..	5,638	
Leave and Pension Allowances.	4,343	..	4,343	..	..	..	4,343	
	Total	9,981	..	9,981	..	..	9,981	
	GRAND TOTAL	2,15,014	..	2,15,014	..	..	2,15,014	

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Ghaggar Canal Project.

No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OF ACCOUNT.	DIRECT CHARGES.								
	Imperial.			Contribution.			Total.		
	Previous.	1915-16.	Total.	Previous.	1915-16.	Total.	Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—WORKS.									
1. HEAD WORKS—									
B.—Land ...	432	...	432	288	...	288	720	...	720
C.—Works ...	59,817	...	59,817	39,878	...	39,878	99,695	...	99,695
K.—Buildings ...	2,186	..	2,186	1,458	...	1,458	3,644	...	3,644
TOTAL	62,435	...	2,435	41,021	...	41,024	1,04,059	...	1,04,059
2. MAIN CANAL AND BRANCHES—									
A.—Preliminary Expenses	7,569	...	7,569	6,046	...	6,046	12,616	...	12,616
B.—Land ..	8,750	..	8,750	8,291	...	8,294	17,044	...	17,044
D.—Regulators ..	10,692	...	10,692	8,434	...	8,434	28,116	...	28,116
E.—Falls and Weirs ...	1,861	...	1,861	5,049	...	5,049	6,910	..	6,910
G.—Bridges ...	24,076	...	24,076	27,000	...	27,000	51,776	..	51,776
H.—Escapes ..	13,188	...	13,188	5,051	..	5,051	18,839	...	18,839
K.—Buildings ..	5,889	...	5,889	15,385	...	15,385	21,274	...	21,274
L.—Earth-work ...	77,205	...	77,205	110,109	...	110,109	1,87,314	...	1,87,314
O.—Miscellaneous ...	1,837	...	1,837	2,588	..	2,588	4,425	..	4,425
TOTAL	1,80,057	...	1,80,057	1,98,253	...	1,98,255	3,48,312	..	3,48,312
3. DISTRIBUTABLES—									
A.—Preliminary Expenses	403	...	403	..	...	...	403	...	403
B.—Land ...	3,914	19	3,933	...	...	...	3,914	19	3,933
C.—Works ...	17,995	...	17,995	..	...	...	17,995	...	17,995
L.—Earth-work ...	29,210	...	29,210	..	...	...	29,210	..	29,210
O.—Miscellaneous ...	14,783	...	14,783	8,745	...	8,745	23,528	...	23,528
TOTAL	66,805	19	66,824	8,745	...	8,745	75,050	19	75,069

IRRIGATION BRANCH.

57

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Ghaggar Canal Project.

No. 2.—CAPITAL ACCOUNT FOR AND TO END OF 1915-16.

HEADS OF ACCOUNT.	DIRECT CHARGES.									Cost of construction as now estimated (Construction Estimate closed on 31st March 1915.)	Expenditure against closed Estimates.		
	Imperial.			Contribution.			Total.						
	Previous.	1915-16.	Total.	Previous.	1915-16.	Total.	Previous.	1915-16.	Total.				
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	s.	Rs.		
I.—DRAINAGE AND PROTECTIVE WORKS													
L.—Earth-work ..	5,801	..	5,801	..	..	..	01	..	5,801		
TOTAL	5,801	..	5,801	..	..	..	5,801	..	5,801		
TOTAL L.—WORKS	2,04,706	19	2,04,617	2,39,724	2,39,724	5,33,222	19	5,33,241	5,33,241	5,33,241			
II.—ESTABLISHMENT													
5.—DIRECTION AND ACCOUNT ..	13,614	..	13,614	(a) 8,453	8,453	8,453	22,067	..	22,067				
6.—EXECUTIVE ..	43,628	..	43,628	30,392	30,392	30,392	74,020	..	74,020				
7.—MEDICAL ..	5,655	..	5,655	..	..	5,655	..	5,655	..	5,655	
LEAVE AND PENSION ALLOWANCE ..	..	..	..	5,439	5,439	5,439	5,439	..	5,439		
TOTAL	62,707	..	62,707	14,284	..	14,284	1,07,081	..	1,07,081	1,07,081	1,07,081		
III.—TOOLS AND PLANT													
12.—MISCELLANEOUS ..	7,923	..	7,923	2,634	2,634	2,634	1,457	..	10,457				
TOTAL	7,923		7,923	2,634		2,634	1,457		10,457	10,457	10,457		
GRAND TOTAL	3,65,318	10	3,65,317	2,85,442	..	2,85,442	6,50,700	19	6,50,770	6,50,770	6,50,770		
V.—LESS RECEIPTS ON CAPITAL ACCOUNT													
NET TOTAL	1,05,318	10	3,65,317	2,85,442	..	2,85,442	6,50,700	19	6,50,770	6,50,770	6,50,770		
APPORTIONMENT													
43.—M. W. AND NAVIGATION, IMPERIAL	3,65,318	10	3,65,317	2,85,442	..	2,85,442	6,50,700	19	6,50,770	6,50,770	6,50,770		

(a). Share of accounts excluded under Imperial from 1912-13.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Ghaggar Canal Project.

No. 3.—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS	IMPERIAL			CONTRIBUTION			TOTAL		
	Previous	1915-16	Total	Previous	1915-16	Total	Previous	1915-16	Total
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Occupiers' rates ..	99,937	17,538	1,17,495	..	..	..	99,937	17,538	1,17,495
Receipts from Plantation ..	..	..	..	..	..	..	..	..	..
Receipts from other Canal produce ..	..	..	..	1	..	1	1	..	1
Rent of Buildings ...	27	2	29	147	148	377	3	380	
Fines ..	200	..	200	70	..	70	330	..	330
Miscellaneous and other Receipts ..	151	..	151	120	..	120	301	..	301
Total ..	1,00,630	17,540	1,18,170	340	1	341	1,00,970	17,541	1,18,511
TOTAL RECEIPTS ..	1,00,630	17,510	1,18,170	340	1	341	1,00,970	17,541	1,18,511

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Ghaggar Canal Project.

No. 3.—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

CHARGES	IMPERIAL.			CONTRIBUTION.			TOTAL.		
	Previous 1915-16	1915-16	Total.	Previous 1915-16	1915-16	Total.	Previous 1915-16	1915-16	Total.
			Rs.			Rs.			Rs.
I.A.)—EXTENSIONS AND IMPROVEMENTS.									
1.—HEAD WORKS ...	5,66	1,120	6,686	1,019	74	5,417	13,237	1,860	16,103
2.—MAIN CANAL AND BRANCHES	5,728	1,788	7,116	1,3	47	1,77	6,050	2,265	8,894
3.—DISTRIBUTARIES	3,100	..	3,100	..	..	..	3,000	..	3,000
4.—DRAINAGE AND PROTECTIVE WORKS.	40	..	60	..	..	..	80	..	80
TOTAL I. A. ...	18,207	2,918	21,205	6,000	1,103	7,193	21,207	4,101	26,398
(I. B.)—MAINTENANCE AND REPAIRS.									
1.—HEAD WORKS ..	27,75	1,964	29,723	18,50	1,309	19,816	46,265	3,273	49,538
2.—MAIN CANAL AND BRANCHES	9,153	4,953	9,148	38,667	1,239	60,106	1,52,400	8,192	1,58,592
3.—DISTRIBUTARIES	22,197	4,726	26,923	160	..	160	22,366	4,726	27,092
4.—DRAINAGE WORKS ...	832	..	832	..	..	..	832	..	832
TOTAL I. B. ...	1,44,321	11,643	175,964	77,042	2,40	80,000	2,21,863	14,191	2,35,054
(I. C.)—COMPENSATION ...	10,778	..	10,908	..	..	..	10,908	..	10,908
(II.)—ESTABLISHMENT.									
5.—DIRECTION AND ACCOUNT (a)	46,202	3,819	50,081	4,277	222	4,499	50,539	4,041	54,580
(6)—EXECUTIVE ESTABLISHMENT	1,65,367	14,372	1,72,739	15,179	627	16,106	1,73,846	14,049	1,88,845
(7).—MEDICAL : Do. ..	6,302	..	6,302	..	..	..	6,302	..	6,302
(7.A.)—REVENUE Do. ...	1,03,470	(b) 527	1,03,997	..	..	..	1,03,470	527	1,03,997
(7.D.)—LEAVE AND PENSION ALLOWANCES.	..	..	..	2,763	110	2,882	2,763	110	2,882
TOTAL ...	3,14,401	18,718	3,33,119	22,510	93	23,487	3,36,020	10,056	3,56,606
(III.)—TOOLS AND PLANT									
12.—MATERIALS	—660	—26	—692	..	..	..	..	..	..
13.—REPAIRS AND CARRIAGE...	3,358	140	3,507	1,672	65	1,727	4,361	178	4,542
TOTAL ...	2,092	113	2,813	1,072	55	1,727	4,361	178	4,542
IV.—REFUNDS OF REVENUE									
TOTAL ...	2,432	..	2,432	20	..	20	2,432	..	2,432
Indirect Charges debitable to Revenue Account as per Account No. 5.	4,93,051	33,392	5,26,143	1,07,763	4,764	1,12,517	6,60,804	38,156	6,33,960
TOTAL ...	41,016	2,621	46,637	..	..	..	41,016	2,621	46,637
Balanc Net Revenue ...	5,37,067	36,013	5,73,080	1,07,763	4,764	1,12,517	6,44,820	40,777	6,85,597
GRAND TOTAL ...	1,01,630	17,610	1,18,170	340	1	341	1,00,970	17,541	1,18,611

(a). Share of account excluded under Imperial from 1912-13.

(b). Includes Rs. 527 as fee for collection of revenue.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Ghaggar Canal Project

No. 5.—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

Particulars	Previous.	1915-16.		Total.
		Rs.	Rs.	
CAPITAL—				
Capitalization of abatement of Land Revenue	2,000	..	..	2,000
Leave and Pension Allowances .. { Imperial	8,792	..	..	8,792
Contribution	5,439			5,439
Total ..	10,231	..	..	10,231
<i>Deduct—Leave and Pension Allowances debitable to Bilanir State treated as direct charge transferred to Account No. 2 of the canal.</i>	5,439	..	..	5,439
REVENUE—				
Net debit able to Imperial	10,792	..	..	10,792
Capitalization of abatement of Land Revenue .. ..	..	..	..	..
Leave and Pension Allowances .. { Imperial	44,016	2,621	2,621	46,637
Contribution	2,763	119	119	2,882
Total ..	46,779	2,740	2,740	49,519
<i>Deduct—Leave and Pension Allowances debitable to Bilanir State treated as direct charge and transferred to Account No. 5 of the canal</i>	2,763	119	119	2,882
Total	44,016	2,621	2,621	46,637

No. 6.—STATEMENT COMPARING CHARGES TO DATE WITH SANCTIONED ESTIMATE.

PARTICULARS.	CHARGES AGAINST CLOSED SANCTIONS.			CURRENT SANCTIONS.			Total charges to date against old and current sanctions	REMARKS.
	Expenditure against Construction Estimate	Expenditure against open canal sanctions.	Total	Charges to date.	Amount of Sanctioned Estimate.	Unspent Balance of Estimate		
DIRECT CHARGES—				Rs.	Rs.	Rs.	Rs.	
Works ..	4,99,214	35,027	5,33,241	..	..	..	5,33,241	
Establishment ..	1,00,970	6,111	1,07,081	..	..	..	1,07,081	
Tools and Plant ..	10,048	400	10,467	..	..	..	10,467	
Total ..	6,00,232	41,547	6,50,779	..	..	..	6,50,779	
Less Receipts on Capital Account.								
Net Total ..	6,00,232	41,547	6,50,779	..	..	..	6,50,779	
INDIRECT CHARGES—								
Capitalized abatement of Land Revenue.	1,900	100	2,000	..	..	..	2,000	
Leave and Pension Allowances.	7,968	824	8,792	..	..	..	8,792	
Total ..	9,868	924	10,792	..	..	..	10,792	
GRAND TOTAL ..	6,19,100	42,471	6,61,571	..	..	..	6,61,571	

IRRIGATION BRANCH.

PUNJAB PROVINCE:

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Lower Sutlej Inundation Canals including Hajiwah Canal Project.

No. 3.—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS.	IMPERIAL.			CHARGES.	IMPERIAL.		
	Previous.	1915-16.	Total.		Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
Occupiers' rates ..	29,03,285	3,06,519	32,09,804	(I. A.)—EXTENSIONS AND IMPROVEMENTS.			
				1.—MAIN CANAL AND BRANCHES ..	7,76,980	52,205	6,29,281
				3.—DISTRIBUTARIES ..	1,36,895	1,932	1,38,827
				4.—DRAINAGE AND PROTECTIVE WORKS ..	5,688	..	5,688
				TOTAL I. A. ..	0,10,660	54,227	0,73,700
Sales of water ..	2,265	103	2,268	(I.B.)—MAINTENANCE AND REPAIRS.			
				2.—MAIN CANAL AND BRANCHES ..	26,12,604	90,161	27,11,765
Receipts from Plantations ..	63,230	1,412	64,642	3.—DISTRIBUTARIES ..	1,37,547	12,384	1,49,931
				4.—DRAINAGE WORKS ..	3,540	...	3,540
				TOTAL I. B. ..	27,63,601	1,11,535	28,65,226
Receipts from other Canal produce ..	33,802	6	33,808	(I.C.)—COMPENSATION ..	4,094	...	4,094
				(II) ESTABLISHMENT.			
Rent of Buildings ..				1.—DIRECTION AND ACCOUNT ..	4,67,046	12,530	4,80,476
				2.—EXECUTIVE ESTABLISHMENT ..	14,40,201	60,309	14,00,510
				7.—MEDICAL Do. ..	23,148	1,661	21,709
				7A.—REVENUE Do. ..	3,98,761	20,816	(a) 28,579
				TOTAL ..	23,36,06	1,04,218	24,40,274
Fines ..	52,021	2,272	54,303				
Miscellaneous and other Receipts ..				(III)—TOOLS AND PLANT.			
				1.—SCIENTIFIC INSTRUMENTS AND DRAWING MATERIALS ..		...	...
				2.—PLANT AND MACHINERY ..		...	...
				3.—TOOLS ..	108	...	108
				4.—NAVIGATION PLANT ..	..	32	..
				5.—CAMP EQUIPAG ..	..	32	..
				6.—LIVE STOCK ..	..	..	..
				7.—OFFICE FURNITURE ..	33	..	33
				8.—REPAIRS AND CARRIAGE ..	1,022	..	17,287
				MISCELLANEOUS ..	21,137	293	27,432
				TOTAL ..	43,402	1,490	44,892
				(IV)—REFUNDS OF REVENUE.	3,198	130	3,318
				(V)—PROFIT AND LOSS	348	...	348
Contribution ..	12,45,539	..	12,45,539	REVENUE ACCOUNT			
				Miscellaneous Advances ..	—1	39	+38
				Stock ..	+23,501	—743	+23,751
				Stock purchases ..	—98	97	+1
				Stock Sales ..	..	..	..
Other Labour ..	30,21,410	..	30,21,410	TOTAL ..	00,83,745	2,70,003	03,51,748
Shares of Land Revenues collected in the Civil Department ..	88,38,634	3,11,336	91,40,870	CHEMICAL LABOUR ..	39,24,410	..	30,24,410
				TOTAL ..	1,00,08,105	2,70,003	1,02,70,158
				Indirect Charges debitable to Revenue Account as per Account No. 5.	3,00,148	14,591	3,71,739
				TOTAL CHARGES ..	1,03,68,812	2,81,684	1,06,53,807
TOTAL RECEIPTS ..	1,71,60,300	6,21,740	1,77,81,136	BALANCE, NET REVENUE ..	67,01,093	3,30,166	71,27,239
				GRAND TOTAL ..	1,71,60,300	6,21,740	1,77,81,136

(a) Includes Rs. 8,914 on account of fees for collection of revenue.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Lower Sutlej Inundation Canals including Hajiwah Canal Project.

No. 5—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

Particulars.	Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.
REVENUE—			
Capitalization of abatement of Land Revenue	5	—	5
Leave and Pension Allowances	3,60,143	14,591	3,74,734
Total	3,60,143	14,591	3,74,734

" OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Lower Sutlej Inundation Canals Hajiwah Canal Project.

No. 3.—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS.	IMPERIAL.			CHARGES.	IMPERIAL.		
	Previous.	1915-16.	Total.		Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.
Occupiers' rates ..	4,61,186	31,426	4,92,612	(I. A.)—EXTENSIONS AND IMPROVEMENTS.			
				2.—MAIN CANAL & BRANCHES ..	32,956	2,705	35,761
				3.—DISTRICTARIES ..	15	...	15
				TOTAL I. A. ..	32,971	2,705	35,765
Sales of water ..	11	..	11	(I. B.)—MAINTENANCE AND REPAIRS.			
				2.—MAIN CANAL & BRANCHES ..	2,41,210	20,532	2,61,781
				3.—DISTRICTARIES ..	12	..	12
Receipts from Plantations..	157	..	157	TOTAL I. B. ..	2,41,221	20,532	2,61,783
Receipts from other Canal produce.	3	..	3	(I. C.) COMPENSATION ..			
Miscellaneous and other Receipts.	51	..	51	(II)—ESTABLISHMENT.			
				5.—DIRECTION AND ACCOUNT ..	(b) 30,006	..	30,006
				6.—EXECUTIVE ESTABLISHMENT ..	67,122	9,037	76,210
				(7 A).—REVENUE DEPT. ..	31,782	(a) 3,375	35,161
				TOTAL ..	1,28,912	12,170	1,41,382
Total ..	4,61,186	31,426	4,92,612	(III).—TOOLS AND PLANT			
				(1) NAVIGATION PLANT ..	..	
				(12).—MISCELLANEOUS ..	2,455	219	2,674
				(13).—REPAIRS AND CARRIAGE ..			
				TOTAL ..	2,455	219	2,674
Share of land revenue collected in the Civil Department.	4,30,306	35,341	4,65,647	(IV).—REFUNDS OF REVENUE.	..		
				..	620	..	620
Interest on sale proceeds of waste lands benefited				(V).—PROFIT AND LOSS.			
				..	1,06,216	30,022	4,12,210
					16,017	1,747	10,794
				TOTAL CHARGES ..	4,21,203	37,769	4,62,034
				BALANCE NOT REVENUE ..	4,70,630	32,010	5,08,670
TOTAL RECEIPTS ..	9,00,705	60,509	9,70,804	GRAND TOTAL ..	9,00,705	60,509	9,70,804

(a). Includes Rs. 1,032 on account of fees paid for collection of revenue.

(b). Excludes Accounts commencing from 1912-13.

IRRIGATION BRANCH:

62

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Lower Sutlej Inundation Canals Hajiwah Canal Project.

No. 5.—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

Particulars.	Previous.	1915-16.	Total,
	Rs.	Rs.	Rs.
REVENUE—			
Leave and Pension Allowances	18,047	1,747	19,794
Total	18,047	1,747	19,794

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Chenab Inundation Canals Project.

No. 3.—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS.	IMPERIAL.			CHARGES.	IMPERIAL.		
	Previous.	1914-15.	Total.		Previous.	1914-15.	Total.
Occupiers' rates ..	24,76,085	2,04,177	26,10,262	I.A.)—EXTENSIONS AND IMPROVEMENTS. (2).—MAIN CANAL & BRANCHES (3).—DISTRIBUTORIES .. 4).—DRAINAGE AND PROTECTIVE WORKS.	8,86,012	3,868	8,88,900
Sale of water ..	3,360	130	3,508	1,33,643	7,356	1,40,000	
Receipts from Plantations ..	90,860	1,832	92,701	25,101	...	25,101	
Receipts from other Canal produce ..	42,105	208	42,310	TOTAL I. A. ...	10,43,786	11,214	10,55,000
Rent of Buildings ..	1,032	35	1,037	I. B.)—MAINTENANCE AND REPAIRS. (2).—MAIN CANAL & BRANCHES (3).—DISTRIBUTORIES .. 4).—DRAINAGE WORKS ..	30,07,282	90,888	31,67,170
Fines ..	30,123	463	30,768	TOTAL I. B. ...	1,20,031	6,260	1,25,281
Miscellaneous and other receipts ..	2,569	256	2,625	I. C.)—COMPENSATION ... II. ESTABLISHMENT. (3).—DIRECTOR AND ACCOUNT	90,903	750	91,749
Total ..	26,16,361	2,07,135	26,42,796	(3).—EXECUTIVE ESTABLISHMENT (4).—MEDICAL Do. :. (5).—REVENUE Do. :.	16,01,813	(a) 36,390	16,41,212
Contribution ..	11,47,500	..	11,47,500	TOTAL ...	21,05,408	47,617	21,53,025
Other Labour ..	24,08,114	..	24,08,114	III). TOOLS AND PLANT (12).—MISCELLANEOUS (8).—REPAIRS AND CARRIAGE	30,485	526	31,014
Total ..	61,70,981	2,07,435	63,78,116	TOTAL ...	30,184	526	31,014
Share of Land Revenue collected in the Civil Department ..	93,60,125	2,64,100	90,30,318	IV).—REFUNDS OF REVENUE V).—PROFIT AND LOSS	9,095	201	9,356
Total Receipts ..	1,55,37,100	4,71,025	1,60,08,731	TOTAL ...	425	..	425
				Other Labour ..	..	..
				TOTAL ...	..	..
				Indirect Charges debitable to Revenue Accounts as per Account No. 5.	3,14,213	7,041	3,51,254
				TOTAL CHARGES ..	..	..
				Balance Net Revenue ..	..	..
				GRAND TOTAL ...	..	..

(a). Includes Rs. 5,309 on account of fees for collection of Revenue.

(b). Excludes accounts commencing from 1912-13.

IRRIGATION BRANCH, PUNJAB PROVINCE,
OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Chenab Inundation Canals Project.

No. 5.—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

Particulars.	Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.
REVENUE—			
Capitalisation of abatement of Land Revenue	8,161	370	8,536
Leave and Pension Allowances	3,36,052	6,666	3,42,718
Total	3,44,313	7,041	3,51,354

IRRIGATION BRANCH.

07

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Muzaffargarh Inundation Canals Project.

No 3.—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS.	IMPERIAL.			CHARGES.	IMPERIAL.		
	Previous.	1915-16.	Total.		Previous.	1915-16.	Total.
			Rs.		Rs.	Rs.	Rs.
Receipts' rates ...	28,70,336	2,67,240	31,46,576	(I. A)—EXTENSIONS AND IMPROVEMENTS. 1.—MAIN CANAL AND BRANCHES 2.—DISTRIBUTARIUS 3.—MAINTENANCE AND PROTECTIVE WORKS	7,06,968	6,613	7,18,581
Bales of water ...	... 1,625	7	1,632	TOTAL I. A. ...	8,14,104	24,170	8,38,364
Receipts from Plantations ...	1,10,819	5,826	1,16,675	(I. B)—MAINTENANCE AND REPAIRS. 1.—MAIN CANAL AND BRANCHES 2.—DISTRIBUTARIUS 3.—MAINTENANCE AND REPAIRS	26,97,330	1,58,396	28,55,726
Receipts from other Canal produce.	6,721	677	7,298	TOTAL I. B. ...	29,67,090	1,90,207	31,63,397
Fines ...	... 20,715	68	20,783	(I. C)—COMPENSATION. II—ESTABLISHMENT. 1.—DIRECTION AND ACCOUNT. 2.—EXECUTIVE ESTABLISHMENT. (7 A)—REVENUE DO. ...	5,89,080	(b) 22,502	6,12,572
Miscellaneous and other Receipts.	5,510	2,203	7,713	TOTAL ...	13,30,012	66,871	14,05,883
Total	... 30,24,756	2,75,029	33,00,085	III—TOOLS AND PLANT. 1.—SCIENTIFIC INSTRUMENTS 2.—PLATE AND MACHINERY 3.—FOOTS 4.—NAVIGATION 5.—CAMP EQUIPAG 6.—LIVE STOCK 7.—OFFICE FURNITURE 8.—REPAIRS AND CARRIAGE 12.—MISCELLANEOUS	6,38,694	(a) 36,107	6,69,891
Contribution	... 8,01,270	...	8,01,270	TOTAL ...	25,62,686	1,25,660	26,88,346
Other labour	... 24,34,233	...	24,34,233	IV—REFUNDS OF REVENUE.	51,819	3,370	55,228
Total	... 62,60,258	2,75,029	65,36,197	V.—PROFIT AND LOSS.	1,131	..	1,131
Share of Land Revenue collected in the Civil Department.	1,02,82,485	3,70,281	1,06,22,766	SUSPENSE ACCOUNT. Miscellaneous advances Stock Stock sales Stock purchases London stores	4	...	4
Total Receipts	... 1,65,12,753	6,46,213	1,71,58,966	TOTAL ...	55,073	—9,331	46,342
				Other labour	... 24,34,233	...	24,34,233
				TOTAL ...	88,98,002	3,10,086	92,38,177
				Indirect Charges debitable to Revenue Account as per Account No. 5.	3,78,060	17,892	3,95,952
				TOTAL CHARGES	... 92,70,162	3,07,977	96,31,129
				Balance, Net Revenue	... 72,80,601	2,88,216	76,24,887
				GRAND TOTAL	... 1,65,12,753	6,46,213	1,71,58,966

(a).—Includes Rs. 7,998 on account of fees for collection of revenue.

(b).—Excludes accounts from 1912-13.

IRRIGATION BRANCH.

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Muzaffargarh Inundation Canals Project.

No. 5.—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

Particulars.	Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.
REVENUE—			
Capitalization of statement ¹ of Land Revenue	18,055 300	18,355
Leave and Pension Allowances	-	3,60,005 17,502	3,77,507
Total	3,78,060 17,892	3,95,952

IRRIGATION BRANCH.

OFFICE OF ACCOUNTANT-GENERAL.

PUNJAB PROVINCE.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Shahpur Canal Project—Provincial.

No. 8—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS.	PROVINCIAL			CHARGES.	IMPERIAL		
	Previous.	1915-16.	Total.		Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.	(1 A.)—EXTENSIONS AND IMPROVEMENTS.	Rs.	Rs.	Rs.
Oompierre's rates	8,19,200	20,277	8,48,477	2.—MAIN CANAL AND BRANCHES	33,583	..	33,583
				3.—DISTRIBUTARIES	11,487	..	11,487
				TOTAL I. A.	45,070	..	45,070
Sale of water	6,821	600	7,421	(I. B.)—MAINTENANCE AND REPAIRS.			
				2.—MAIN CANAL AND BRANCHES	2,24,766	14,041	2,38,807
				3.—DISTRIBUTARIES	62,063	6,288	67,351
Receipts from Plantations	5,104	..	5,106	TOTAL	2,86,828	19,329	3,06,158
				(I.C.)—COMPENSATION	62	..	62
Receipts from other Canal produce.	466	20	486	II.—ESTABLISHMENT			
Water power	926		926	5.—DIRECTION AND ACCOUNTS	46,596	4,745	51,341
Fines	713		713	6.—EXECUTIVE ESTABLISHMENT			
Miscellaneous and other Receipts.	3,603	..	3,603	7.—MEDICAL Do.	3,10,140	(b) 14,223	3,24,363
				7.A.—REVENUE Do.			
				TOTAL	3,56,736	18,909	3,75,704
				III.—TOOLS AND PLANT			
				12.—MISCELLANEOUS	1,437	..	1,437
				13.—REPAIRS AND CARRIAGE	1,093	..	1,093
				TOTAL	3,130	..	3,130
Total	8,36,925	29,902	8,66,830	V.—PROFIT AND LOSS	610	..	610
Share of Land Revenue collected in the Civil Department.	1,68,747	6,457	1,75,204	Indirect Charges debit able to Revenue Account as per Account No. 5.	51,034	2,656	54,290
				TOTAL CHARGES	7,44,077	40,963	7,85,030
				BALANCE NET REVENUE	2,01,508	—4,684	2,57,004
TOTAL RECEIPTS	10,05,076	36,359	10,42,034	GRAND TOTAL	10,05,076	36,359	10,42,034

(a). Excludes share of accounts commencing from 1912-13.

(b). Includes Rs. 783 on account of fees for collection of revenue.

IRRIGATION BRANCH.

70

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Shahpur Canal Project—Provincial.

No. 5.—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

Particulars.	Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.
REVENUE—			
Capitalization of abatement of Land Revenue	..	1,693	1,693
Leave and Pension Allowances	..	49,941	2,656
			52,597
Total	..	51,634	2,656
			54,290

IRRIGATION BRANCH.

PUNJAB PROVINCE.

" OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Ravi Inundation Canals Project.

No. 3—REVENUE ACCOUNT FOR AND TO END OF 1915-16.

RECEIPTS.	IMPERIAL.			CHARGES	IMPERIAL.		
	Previous	1915-16.	Total.		Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.	(I-A.) EXTENSIONS AND IMPROVEMENTS.	Rs.	Rs.	Rs.
Ocupiers' rates	..	1,04,801	382	1,05,273	(2)—MAIN CANAL & BRANCHES	500	..
				TOTAL I. A. ..	500	..	500
				(I.B.) MAINTENANCE AND REPAIRS.			
Sales of water	..	207	..	(2).—MAIN CANAL & BRANCHES	80,507	..	
				3.—DISTRIBUTARIES ..	9,622	..	9,622
				TOTAL I. B. ..	90,110	..	90,110
Fines	..	36	..	I C.—COMPENSATION ..	34	..	34
				II.—ESTABLISHMENT.			
				(5).—DIRECTION AND ACCOUNT	(a) 17,855	2,088	19,943
Miscellaneous and other Receipts.	8	...		(6).—EXECUTIVE ESTABLISHMENT			
				(7).—MEDICAL Do.	1,15,051	(b) 2	1,15,053
				(8).—REVENUE Do.			
				TOTAL II ..	1,32,000	2,090	1,34,990
				(III). TOOLS AND PLANT			
TOTAL	..	1,05,232	382	1,05,614	(12).—MISCELLANEOUS ..	1,722	..
				(13).—REPAIRS AND CARRIAGE	915	..	915
				TOTAL ..	2,637	..	2,637
				IV.—REFUNDS OF REVENUE.			
				TOTAL ..	1,000		1,000
Share of Land Revenue collected in the Civil Department.	1,25,475	888	1,26,363	Indirect Charges debit able to Revenue Accounts as per Account No. 6.	18,600	203	18,699
				TOTAL CHARGES ..	2,54,808	2,383	2,57,191
				Balence, Net Revenue ..	—24,101	—1,113	—25,214
TOTAL RECEIPTS ..	..	2,30,707	1,270	GRAND TOTAL ..	2,30,707	1,270	2,31,977

(a). Share of Account excluded from 1912-13.

(b). Includes Rs. 2 on account of fees for collection of revenue.

IRRIGATION BRANCH.

72

PUNJAB PROVINCE.

OFFICE OF ACCOUNTANT-GENERAL.

ADMINISTRATIVE ACCOUNTS FOR THE YEAR 1915-16.

Ravi Inundation Canals Project.

No 5—ACCOUNT OF INDIRECT CHARGES FOR AND TO END OF 1915-16.

Particulars.	Previous.	1915-16.	Total.
	Rs.	Rs.	Rs.
REVENUE—			
Leave and Pension Allowances	18,606	293	18,899
Total	18,606	293	18,899

